

# Manufacturers Record

## Exponent of America



\$6.50 per Year.  
Single Copy, 20 Cents.

Baltimore, Md.  
FEBRUARY 21, 1924

### Origin of the Term "The New South."

President T. L. Kirkpatrick, of the Chamber of Commerce, Charlotte, N. C., referring to a notice in the Manufacturers Record recently, stating that the Blue Book of Southern Progress, 1924 edition is in course of preparation, writes:

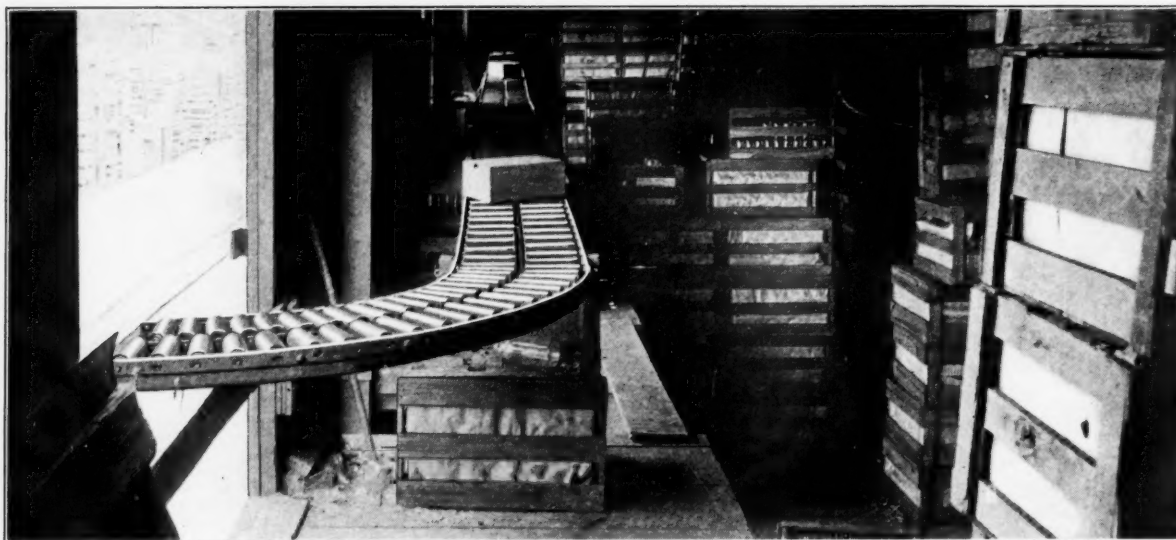
"Please send 25 copies of this book to Mr. C. O. Kuester, Business Manager of the Charlotte Chamber of Commerce. We regard this book as of pre-eminent value to the South and the nation. The educational bodies in the South charged with teaching the youth, should see to it that a copy of this book is placed in the hands of every boy and girl under their care."

We would like to see the same spirit shown by every commercial organization in the South, and by business men generally. The facts given in the Blue Book of Southern Progress are not available anywhere else. They represent the accumulated work of this office during forty years, or more, of study and the gathering of statistics of the South, and they embody the latest information that is compiled by the United States Census Bureau and by our Governmental departments, both State and Federal.

In connection with these elaborate statistics which cannot be had from any other source, the Blue Book of Southern Progress always carries from year to year many remarkable facts about the history of the Old South, showing what it accomplished prior to 1860, some facts in regard to the fearful losses due to the Civil War and Reconstruction which halted the progress of this section for many years, and then an outline of what the South of today is doing, in order that men and women and boys and girls in all sections where they have the privilege of reading these facts, may have a new and broader understanding of the South, past, present and future.

The edition for 1924, which will be distributed in the spring as other editions have been, is now in preparation, and advance orders will be welcomed. Last year we had many subscriptions from individuals, from business men, from great industrial concerns, and railroads, and banks, running all the way from 25 up to 5000 copies, and the distribution throughout the South and throughout the North and West, and to some extent in Europe, of these copies which were ordered for that purpose, has had a material effect in awakening the people of all parts of this country to the true story of the Old South, the struggles through which it passed, and the superb achievements which it has made during the last 25 years in which there has been a revival, a renaissance, or rebirth of the Old South.

The term "New South" is a misnomer. The first record of the use of the name so far as we can learn, was that of a publication issued by Union troops at Port Royal, S. C., during the occupation of that place in Civil War days, when a paper was established by the troops called "The New South." In its broadest sense there is no "new" South. All that the South is doing today is but a revival of the forces that were at work prior to 1860; and the facts in regard to the Old South and the South of today, and the outlook for the South in the future, should be known by every college boy and girl, as well as by every business and professional man and every woman in the South; and these facts should be sent broadcast throughout the nation. The price of the Blue Book is 50 cents a copy for less than 500 copies, forty cents a copy for orders of 500 to 1000 copies, and thirty cents a copy for 1000 or more. Advance orders for ten copies or less should be accompanied by check, money order or stamps.



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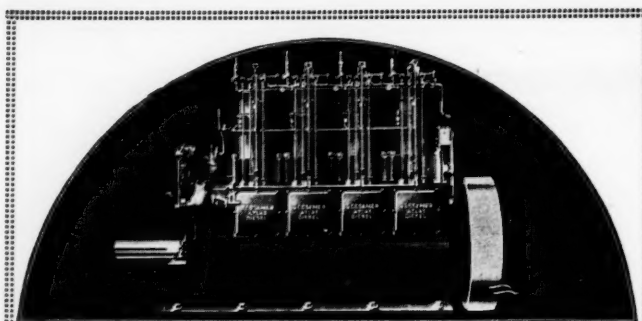
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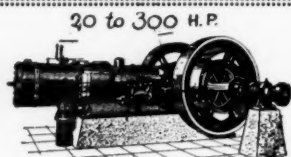
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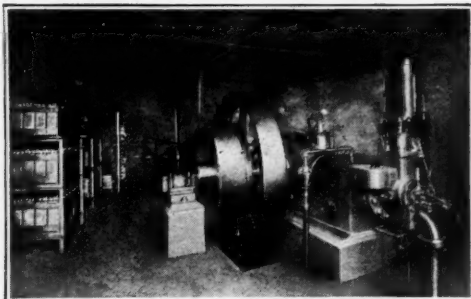
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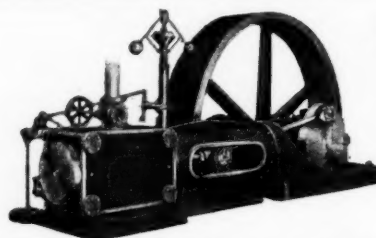


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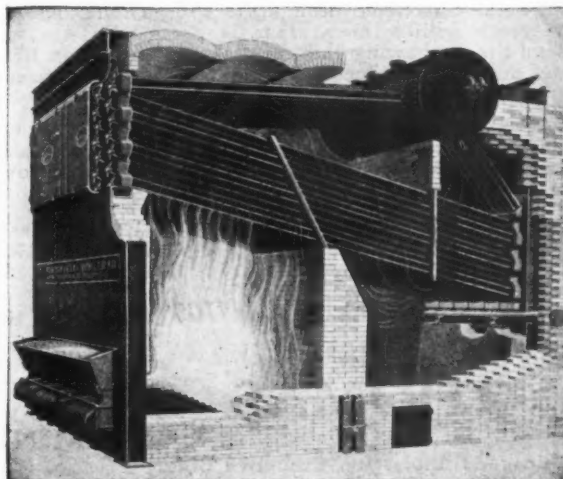
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Castings 1 pound to 30,000 pounds.

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*No casting is 100% correct unless made of True Semi-Steel*

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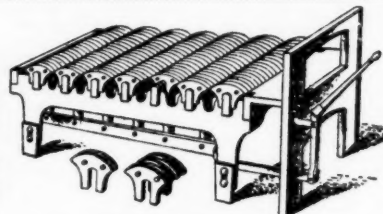
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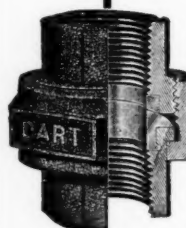
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Booklet 326 portrays the complete line.

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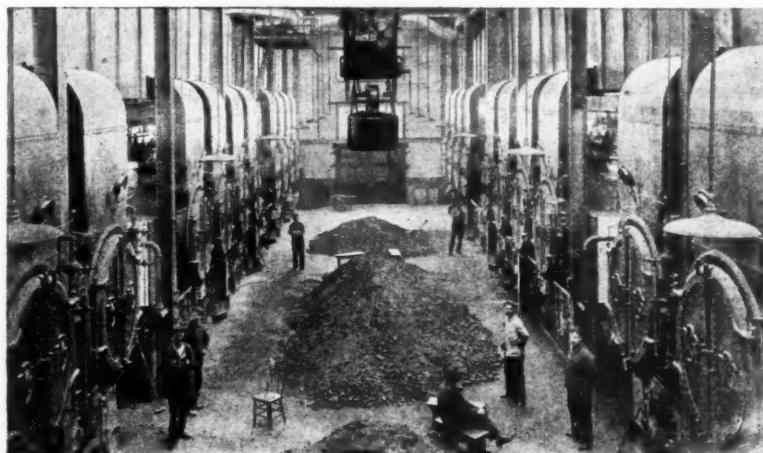
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Boiler room at Pacific Mills, Lawrence, Mass., 4200 B. H. P. of Foster-equipped H. R. T. boilers

## In textile mills for example—

The Riverside and Dan River Cotton Mills, American Woolen Mills, Botany Worsted Mills, Barbour Flax Spinning Co., National Spun Silk Co., American Velvet Co., Clark Thread Co., Bradford Dyeing Asso., American Printing Co.—this typical list of Foster-equipped plants indicates how every branch of the textile industry has found that it pays to use Foster Superheaters.

An examination of the progressive, efficient plants in every other industry tells the same story—that for greatest economy of power generation, and for best operating results from boilers and engines, a Foster Superheater installation is a prime necessity.

The record of more than 10,000 Foster installations, extending over 20 years of service in every size and type of stationary power plant, amply prove the worthwhile improvements in overall plant efficiency provided by their use in year-after-year operation.

Let us tell you more about what Foster Superheaters have done in other plants and give you definite figures of what they will do in your plant. Write for the Foster Superheater Book and tell us your operating conditions.

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Manufacturers of Foster Superheaters, Economizers and Oil Heaters

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Plants at Dansville, N. Y., and Egham, England

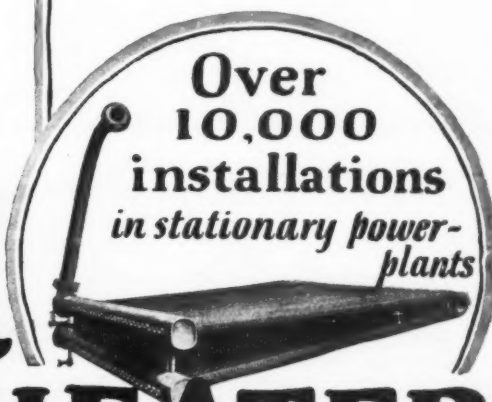
## A few users of Foster Superheaters

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Ice.....American Ice Co.  
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Soap.....N. K. Fairbanks Co.  
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1. A steel tube for strength; a cast iron shell for durability.
2. Four to six times more heat absorption surface as obtained from bare tubes.
3. Reserve heat stored for sudden demands.
4. Least space for desired superheating effect.
5. Steam stays close to hot tube surface.
6. Can be applied to any make or type of boiler.

**FOSTER**  
*The* **SUPERHEATER**  
*with the extended surface*



*Men like you  
asked that this  
book be re-  
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The first edition of this Handbook of Refrigeration was quickly exhausted, and we have just completed a reprint to meet the many requests for it from engineers.

Contains 90 pages of tables and data gathered during 32 years of refrigerating experience, well indexed for easy reference. The first section is a handy catalog of Triumph Ammonia Fittings.

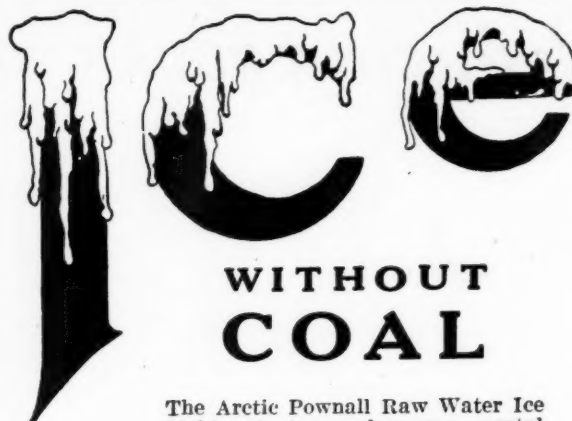
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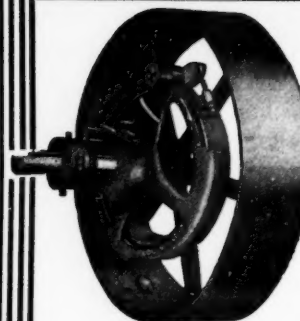
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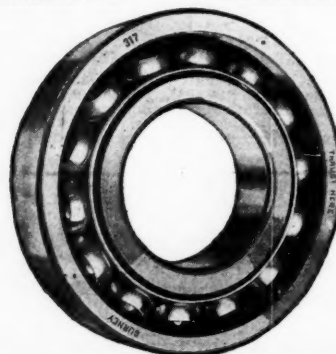
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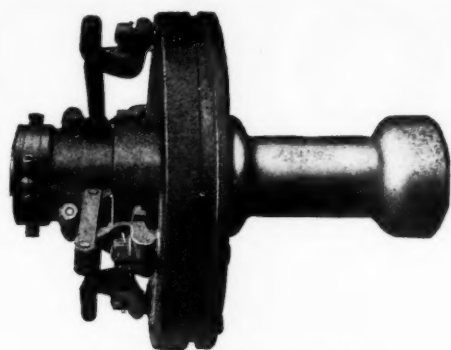
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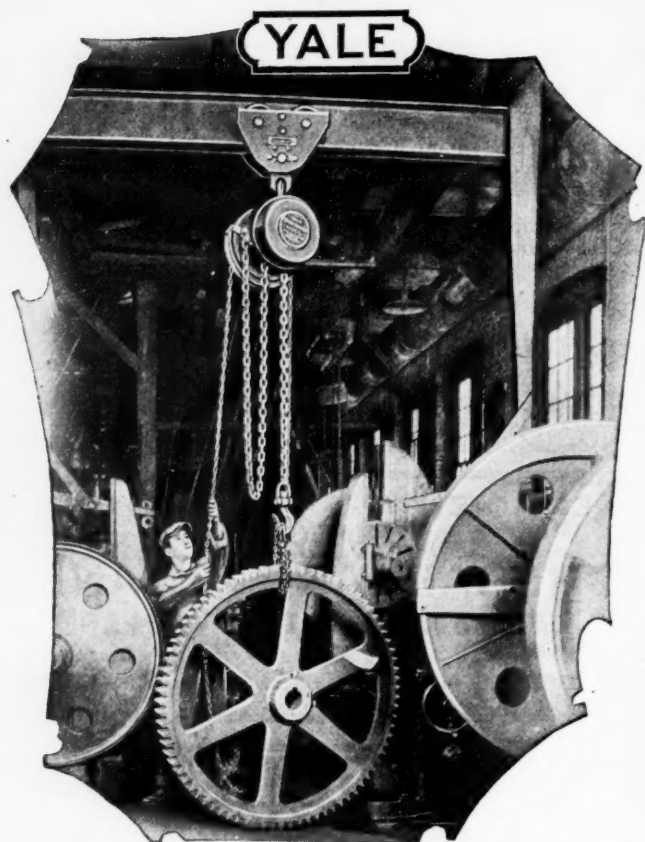
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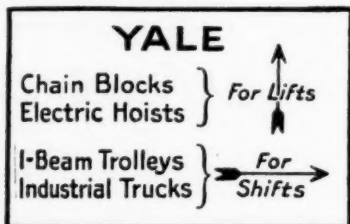
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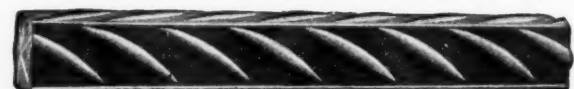
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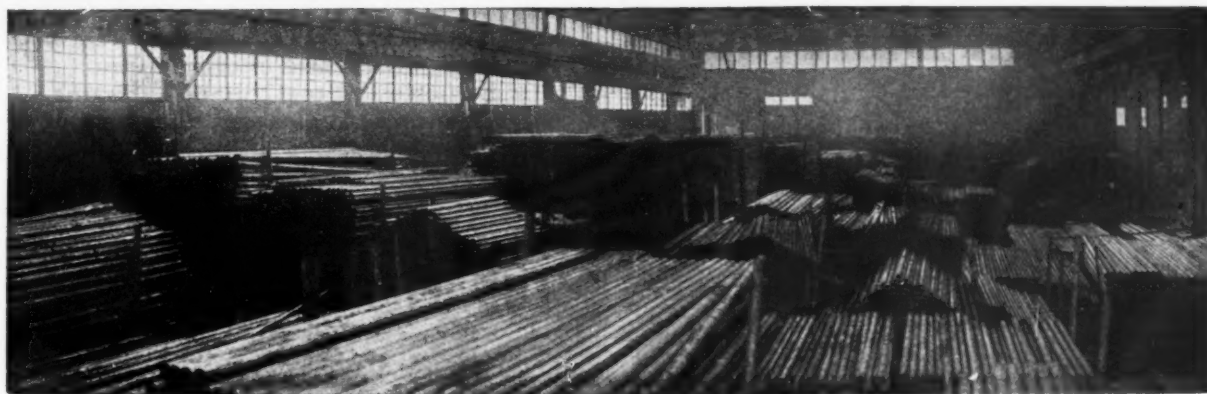
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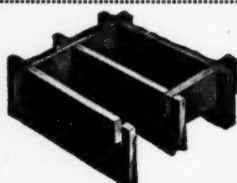
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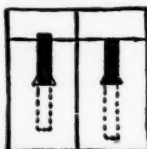
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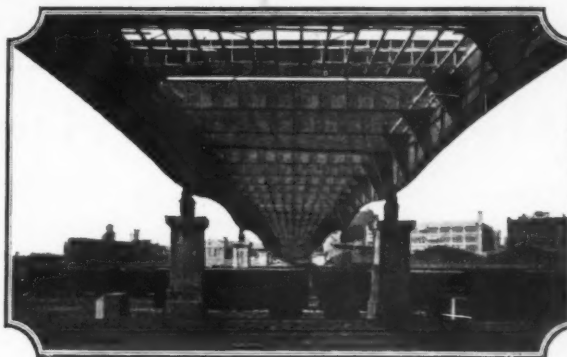
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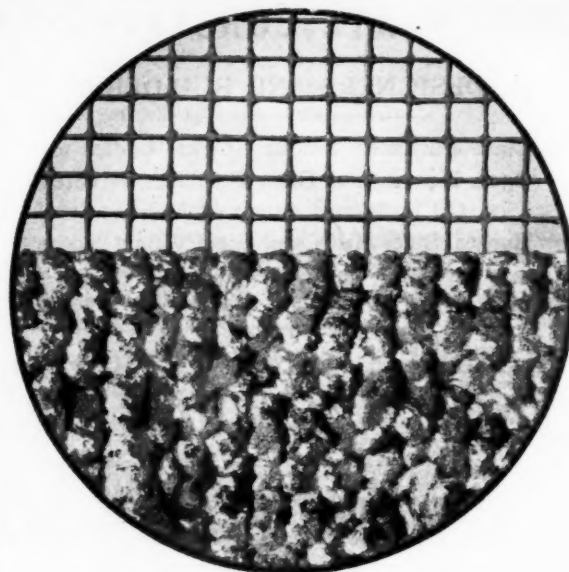
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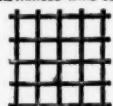
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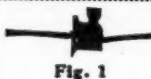


Fig. 1



Fig. 2

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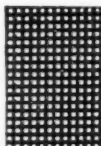
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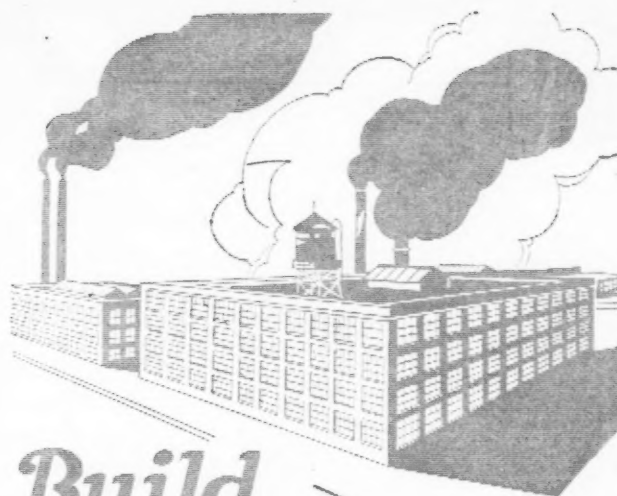
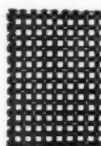
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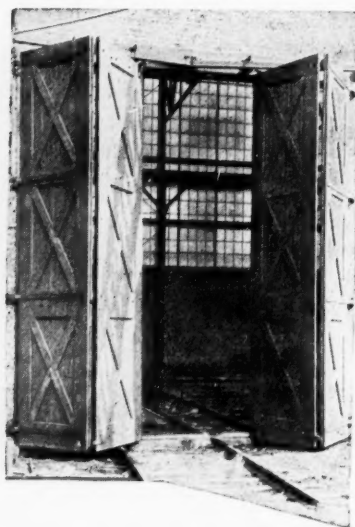
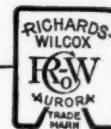
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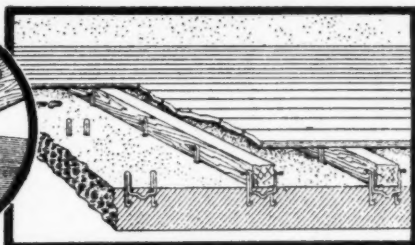
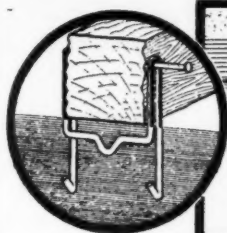


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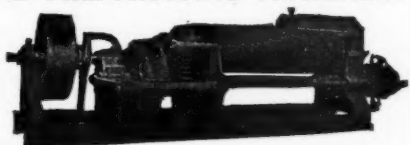
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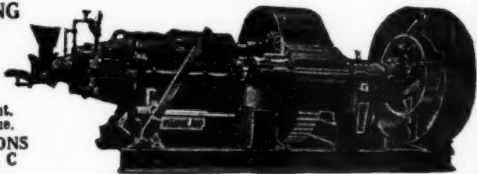


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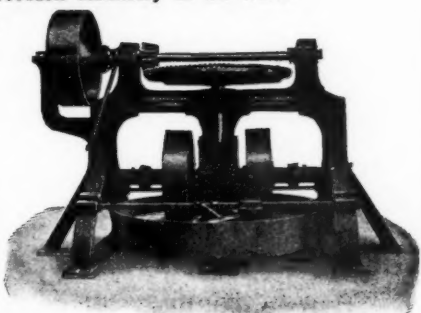
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# 15 to 1

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By  
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**Two Laborers Can Adjust  
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Two Carpenters Splice One 4x4**

This is a saving of "15 to 1" on your labor.

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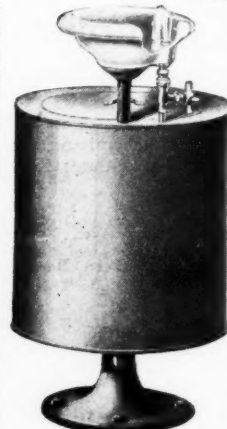
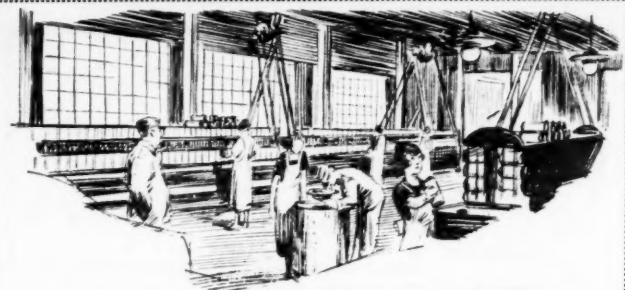
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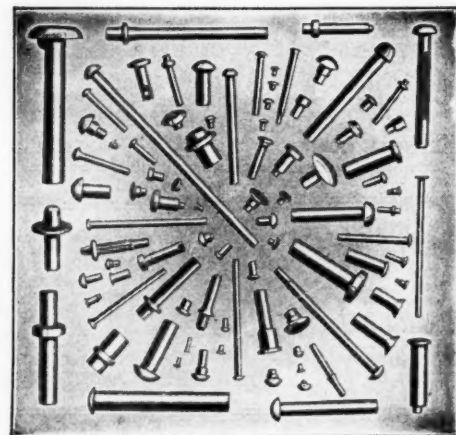
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The Federal Engineer considers first cost only as compared with durability and life of the structure.

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We operate our own Creosoting Works, Sawmills, etc., manufacturing Yellow Pine Lumber, Piles, Poles, Cross Ties, Timbers, etc.

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*We solicit your inquiries*

Poles, Timbers  
Cross Ties

**AMCRECO**  
Lowry Process  
Creosoted Wood

Piling, Lumber  
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Where hard usage puts flooring to the supreme test—in factory, warehouse or mill, *Maple Flooring* is always preferable. Write us today for full information as to sizes and grades, also delivered prices in any quantity, anywhere.

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Enduring  
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For Preserving Railroad Cars Wagon. Agricultural Implements. Barns, Bridges, etc., has no equal. Fine grind and uniformity of color guaranteed.

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Dipping shingles separately in molten zinc after they have been cut and formed puts a coating on the edges as well as the sides.

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Prime roofing tin only is used in making Cortright hand-dipped shingles.

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## SHEET METAL BUILDING MATERIALS OF EVERY DESCRIPTION

Painted and Galvanized Steel  
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Anything in Roofing and Sheet Metal Anywhere

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Largest Shippers of Roofing Slate in The World

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Artistic and Ornamental in appearance and is positively guaranteed to be Fire, Lightning, Rain, Storm and Wind-proof.

Its extreme lightness (about one-eighth that of slate), durability and moderate cost commend it to those wishing something out of the ordinary in roofing.

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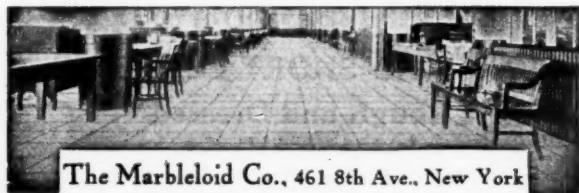
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Oconee Vertical Hollow Building Tile, the most economical form of permanent construction, is being used more and more each year. Vertical hollow tile gives a circulating air chamber guaranteeing dry walls; needs no painting, and the speed with which it can be laid —thereby reducing laborer's time—effects a great saving.

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Light buff unglazed Terra Cotta  
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*Bust of Robert Fulton, superimposed upon replica  
of the first steamboat, the Clermont, used as motif  
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No higher tribute could be paid to Terra Cotta than that it should form the entire front surface of the Fulton National Bank, which is the only building in Atlanta devoted wholly to the general banking business and used exclusively as a banking house by its owners.

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A true California Spanish Mission Roofing Tile in a range of soft autumn foliage shades.



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*Manufactured for first time in the East by*

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White, Red and Porphyry Gray Floor Tile.

6 x 6, 6 x 3 Glazed Wall Tile, 6" Sanitary Base, 6 x 3  
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Write for prices. State quantities and kinds of  
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Are obtained solely by scientifically burning the wonderful clays in our deposits. No chemicals or foreign ingredients are used whatever.

The wide range of color tones blend harmoniously and give the finished structure a distinctive individuality that enhances the value and salability of the building.

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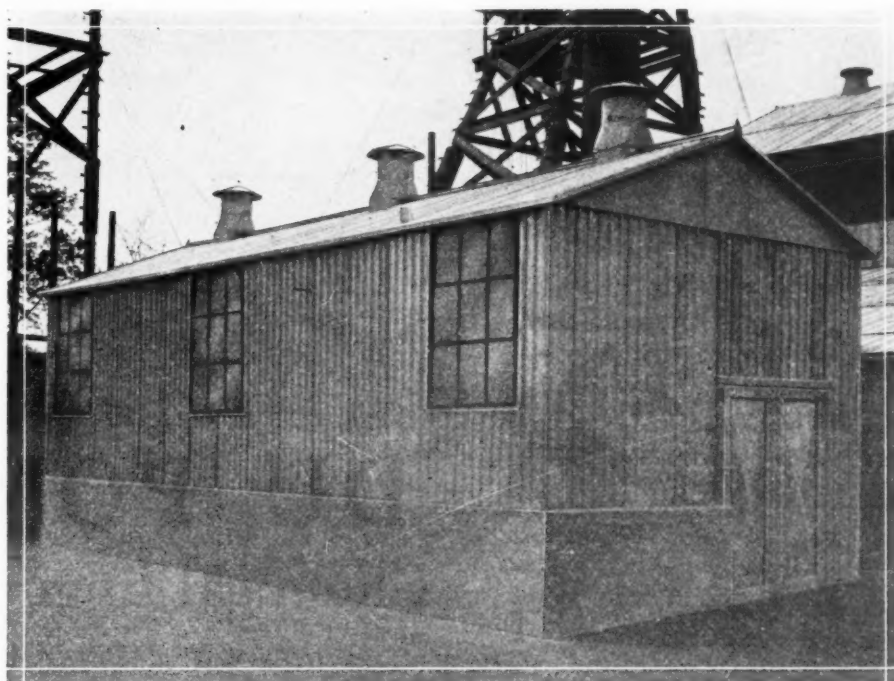


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on an order to us simply means to assemble the fabricated parts of your building and ship. In order to be able to render this service every part of a

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—and now  
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Chemical Engineers  
*offer a complete*  
**Paint Service**  
to American Industry

**Y**OU have known the du Pont Company for many years as a leader in the explosives industry. You have had implicit confidence in the quality of du Pont Explosives.

The manufacture of explosives is a chemical science. Du Pont quality has been achieved through the work of one of the finest and largest staffs of chemical engineers in the world. Thus it was only natural that the great fund of chemical knowledge and experience built up through over a century of work, should be gradually applied in other fields and to other products.

This explains why the du Pont Company now makes many products besides explosives—products made from similar basic materials or by manufacturing processes in which the highest degree of chemical knowledge is necessary.

It was with this knowledge and experience that the du Pont Company entered the Paint and Varnish field.

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Five years ago, four paint and varnish manufacturers were united under the control of du Pont Chemical Engineers.

These four companies provided an aggregate of 327 years' experience in making high quality paints and varnishes. Each was a recognized leader in a particular type of product.

To this practical, specialized experience in paint and varnish making, was added the cumulative experience of the entire du Pont organization in chemical manufacturing.

After five years of research, analysis and testing of one quality product against another in the laboratory and in the field, du Pont Chemical Engineers have standardized paints and varnishes that give the best service for each purpose.

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The adequate protection of various metal surfaces against corrosion is, as leading engineers recognize, a science, based upon painstaking chemical research, of the establishment of exact chemical formulas to meet given conditions.

For five years now, du Pont Chemical Engineers, in field and in laboratory have been testing, experimenting, investigating. And the result of that research, backed by the cumulative knowledge of the whole du Pont organization, is a line of paints for every type of metal surface under every condition of exposure, fumes and temperature.

### THE MOST PER DOLLAR IN PAINT PROTECTION

*Write us describing your requirements, and take advantage of this complete du Pont Paint Service.*

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is one of the broadest and most widely debated topics in the field today. To the du Pont Organization the Plant Owner, Superintendent, and Engineer can bring the most varying problems, secure in the knowledge that they will be met by paint and varnish products which have been developed to meet practically every condition that can arise in constructive work—developed not only in the laboratory but through exhaustive tests on plant operations of every kind.

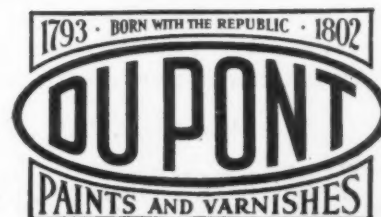
#### Manufacturing Control Which Insures Uniform High Quality

The development of du Pont Paint and Varnish products themselves is of no greater importance than the manufacturing improvements provided by du Pont Chemical Engineers.

They have added a scientifically exact system of a manufacturing control which applies from the raw material, through every process to the finished product.

This insures the uniform high quality of every barrel and every can of du Pont Paint and Varnish.

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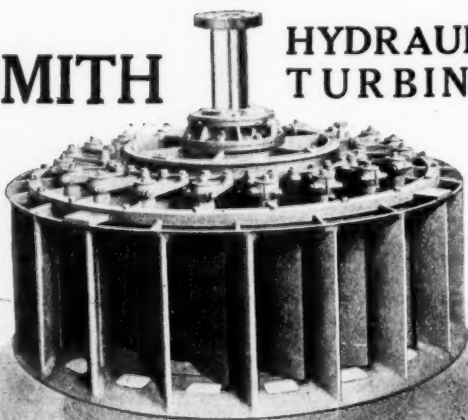
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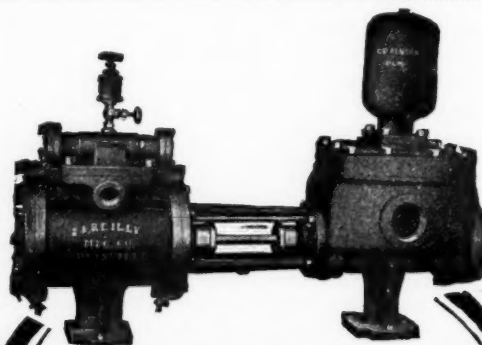
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MAKERS OF THE GRAINGER PUMP  
for all classes of service.

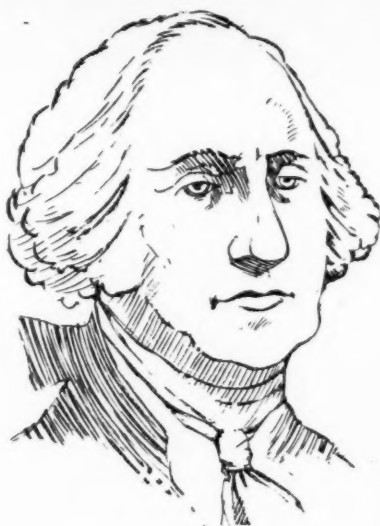
Each pump is carefully tested to full rated capacity before shipping. The manufacture of this pump will be continued by us and we are prepared to supply repair parts.

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STRUCTURAL IRON WORKS

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# Grainger Pumps



WASHINGTON

February 22

*He couldn't tell a lie*

LINCOLN

February 12

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# They would have approved the

## PULSOMETER STEAM PUMP

Washington the truthful would have OK'd Pulsometer advertising and catalogs. He hated misstatements and evasion. *We do too.* For instance, when our ads tell you the Pulsometer *never needs oiling*, and you look at the parts in the catalog, you'll find no "lubricator" listed, because *there isn't any on the Pulsometer.* When we tell you the Pulsometer delivers so many gallons a minute, that means *on the job*, men, not simply *on paper!*

Lincoln would have OK'd the Pulsometer. His love of

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So this month, when you lay off on the two big holidays, let them both remind you of the pump that never "lays off." Send today for the Catalog—44 pages of truth about freedom from pump troubles.

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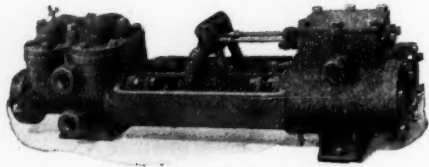


Fig. 106

7½ x 3 x 10" Klein Type for  
500 lbs. working pressure.

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Bulletin 102-A on request.

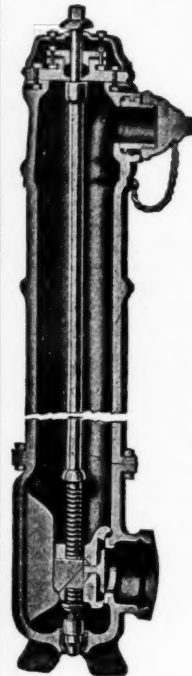
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Ludlow Slide Gate Fire Hydrants are cheapest in the long run. The records they have made in our large cities where many others are in use prove that there is no other hydrant on the market with a greater efficiency and a smaller upkeep cost.

Ludlow Hydrants cannot clog. All working parts are protected from injury by gritty or cutting substances passing through the hydrant. All parts can be removed without digging up the hydrant. Gate-locking device prevents street from being flooded should the standpipe be broken.

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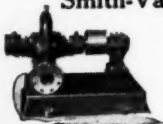
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Smith-Vaile  Pumps



Steam and Power  
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*Good judgement in buying*

THE JOHN H. MCGOWAN CO.  
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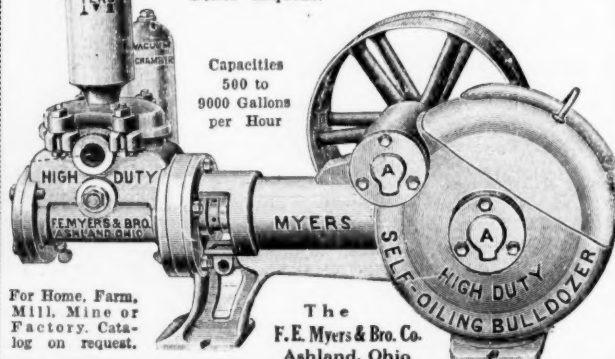
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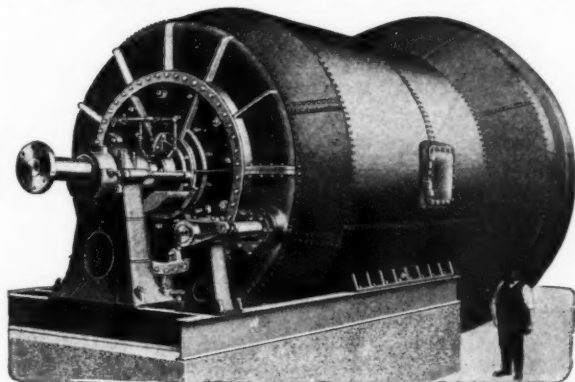
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HORIZONTAL TURBINE DESIGN 19

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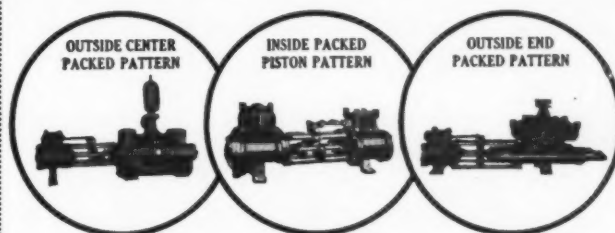
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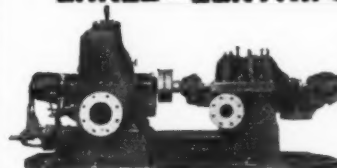
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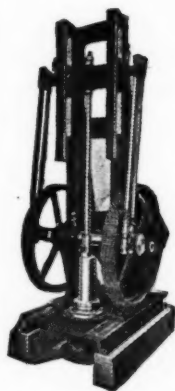
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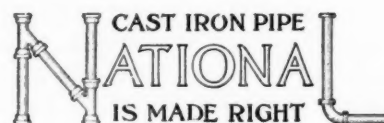
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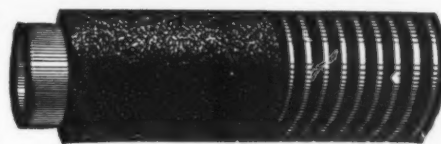
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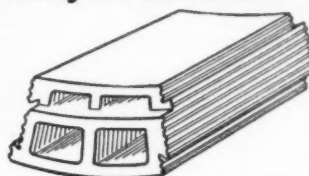
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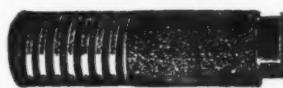
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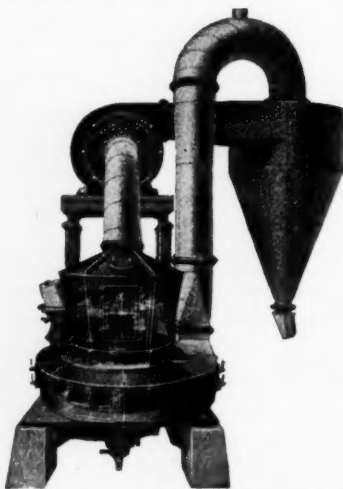
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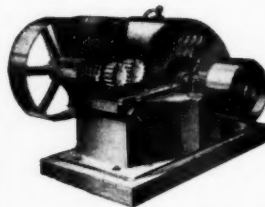
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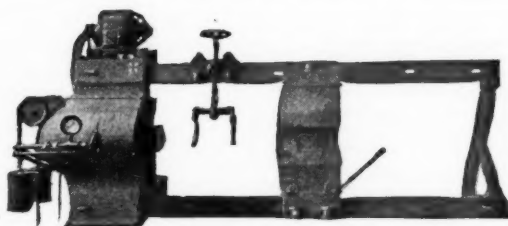
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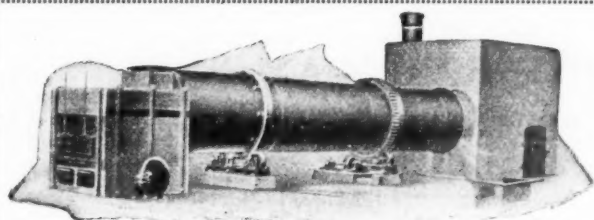
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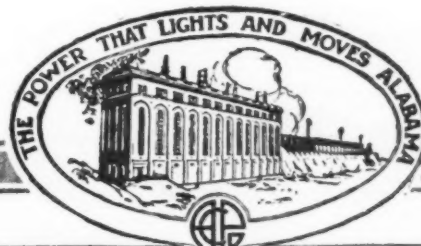
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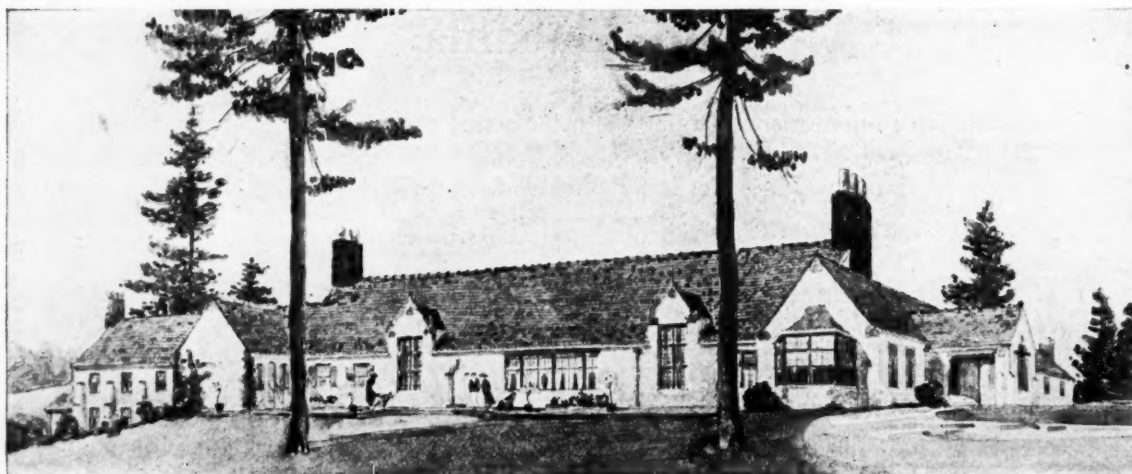
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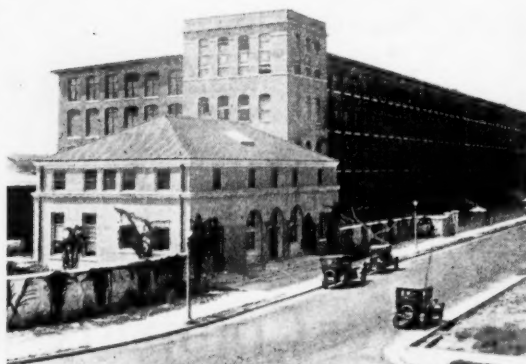
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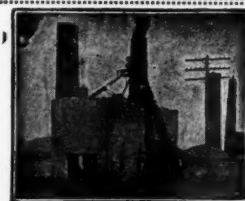
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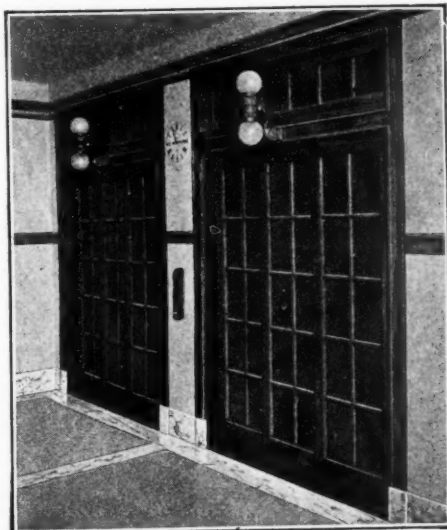
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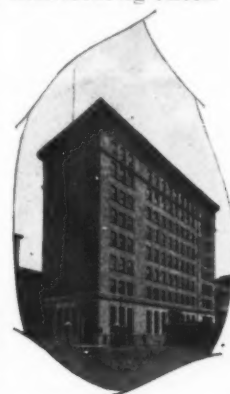


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# Manufacturers Record

Exponent of America



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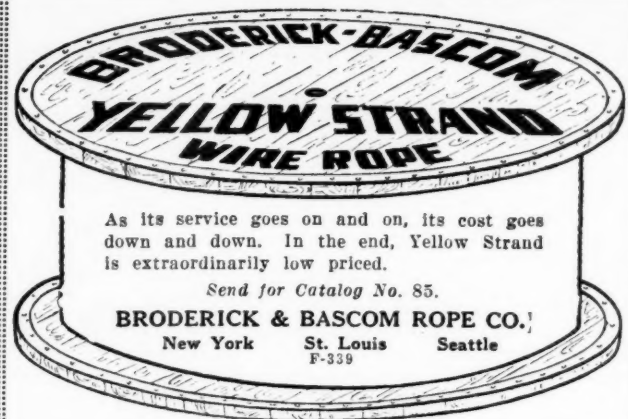
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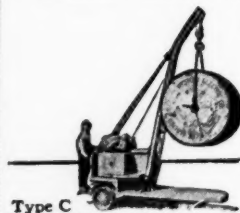
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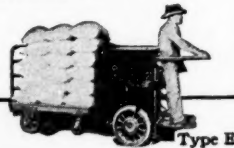
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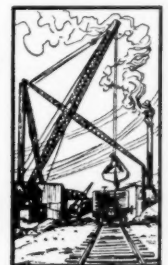
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# Manufacturers Record

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Vol. LXXXV No. 8  
Weekly.

BALTIMORE, FEBRUARY 21, 1924.

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## Non Partisan Consideration of Tax Bill.

**C**HARLES DE B. CLAIBORNE, of New Orleans, one of the foremost bankers of the country and president of the American Bankers League, in protesting against the action of the Democratic caucus of the House of Representatives in making the Garner rates in the pending tax measure a test of Democracy, has issued a statement in which, speaking for the American Bankers League he said:

"We challenge the authority of any group of Congressmen to dethrone the judgment or despoil the wisdom of their colleagues or to render invalid the constitutional right of a sovereign to instruct his representative in Congress. The Garner rates are no more of a test of Democracy than they are a test of religion. Such procedure strikes down free institutions and makes us a government by politicians instead of a government by the people. If this government is to maintain the confidence of the American people, congressmen must consult them on fundamental principles, and must realize that those who pay the taxes have an equity in this legislation that cannot be abridged by a political caucus."

The MANUFACTURERS RECORD is not at all in sympathy with some of the features of the Mellon tax bill. It does not believe in the proposed amendment against tax exempt securities which fortunately has already been defeated in the House. It does not believe that it is necessary to remove some of the so-called nuisance taxes on moving picture tickets, dirks, bowie knives, and kindred things, while leaving high taxation on automobiles and motor trucks. The farmers of the country are more interested in buying their automobiles and motor trucks—and they are among the heaviest buyers—than they are in taking the tax off moving pictures or exempting bowie knives, dirks, circuses, and bowling alleys from taxation. But we do unhesitatingly commend the reduction of surtaxes, not for the benefit of the rich at all, but for the benefit of the country, and for the benefit of the poor man to a greater extent than for the benefit of the rich man.

Under the burdensome surtax now imposed and proposed by the Democratic caucus, rich men are being forced out of business activities where they are greatly needed, instead of the country having the benefit of their great constructive power for the creation of business and the employment of people. These men find in this situation a strong urge to retire from business and devote the rest of their lives to pleasure on the golf field or in other pursuits. Such men will no longer be producers and creators of employment and of wealth. Withdrawing from business activities by reason of this enormous surtax they cease to be an asset to the country and to a certain extent become a liability.

The poor man suffers by reason of this but the rich man does not. Driven by high surtaxes the rich can put their money into tax exempt securities, settle down to a life of

ease and cease to be the nation's great leaders in constructive upbuilding work. High surtaxes therefore while aimed at the rich man will prove a boomerang, an injury not to the rich man but to the poor and to the country's constructive forces.

Mr. Claiborne and his associates of the American Bankers League, speaking not from the standpoint of bankers but from the standpoint of patriotic citizens, ask that the question of a tax bill like that of the tariff shall not be considered from the partisan standpoint nor be dominated by any political caucus. Representatives in Congress who sell their souls to a political caucus merely to be in favor with their own party demonstrate thereby that they have not the kind of backbone and moral courage which is essential to the proper representation of the people of the country.

The MANUFACTURERS RECORD is in hearty sympathy with the idea of stretching the reduction of taxation over just as large a number of people as possible. In this respect it would go very much farther than Secretary Mellon and come more nearly in line with some of the proposed changes made by the Democrats, but a high surtax means such an exorbitant tax on business that it will drive out of the business world thousands of rich men who will become loafers living on their accumulated wealth instead of continuing as active factors in the creation of new wealth. And the creation of this new wealth would inure to the benefit of poor people and industrial workers generally.

The proposition for a twenty-five per cent discount on all 1923 tax bills due in 1924 which seems to have the favor of both parties should be promptly passed without waiting on the general tax bill, so that it could take effect before March 15, the date of the first quarterly payments.

While the situation as to a soldier bonus has greatly changed in the last few years, with many ex-service men strongly fighting a bonus on patriotic and moral grounds insisting that it would be a reflection on the patriotisms of the soldiers, we do not believe that Mr. Mellon's claim that taxes could not be reduced fully as much as he urges, if a bonus were paid, is based on sound grounds. We give full credit to those who are opposing a bonus on patriotic and moral grounds. That is an argument worthy of all consideration, but we regard all claims that this country could not on financial grounds afford to pay a bonus as wholly incorrect and unworthy of our country.

If a bonus were right from moral and patriotic grounds and if its payment would not lessen the moral stamina of its recipients—and that should be the real question at issue—this country could afford to pay it despite all the arguments to the contrary and still reduce income taxation, including cutting the surtax as low as Mr. Mellon suggests. The financial side of the cost of a bonus should we believe be entirely eliminated from the whole discussion. But the



moral and patriotic sides deserve the utmost consideration.

Since the foregoing was written the MANUFACTURERS RECORD has received an announcement from the American Bankers League stating that non-partisan conventions will be held for the purpose of assembling accurate and comprehensive expressions of the people for the information of Congress in dealing with tax reduction measures now before that body. It is proposed to hold the meetings in Richmond, Va., Asheville, N. C., Salt Lake City, Utah, Portland, Ore., Omaha, Nebr., Detroit, Mich., Pittsburgh, Pa., Boston, Mass., Dallas, Tex., and Jacksonville, Fla.

The first meeting at Richmond will be on March 15. The announcement says:

"We are calling a series of Tax Congresses for the purpose of giving representatives of the various groups of tax payers an opportunity to express their views on tax legislation now pending before Congress.

"We invite those who borrow, those who lend, and those who invest in productive enterprises into a citizens council to discuss fundamental problems of Congress to join with us in these deliberations. The issue has no place in partisan politics, and our discussion will be economic and in the public interest."

The League has divided the nation into nine groups, and appointed chairmen for each group. O. J. Sands, head of the American Trust Company at Richmond, is head of the group of states in which the first Congress will be held. The group comprises Virginia, North Carolina, South Carolina, Tennessee, and Kentucky.

Following the State Congresses, a general Congress will be held in Washington, D. C., when the findings of the body will be presented to the Senate Finance Committee.

## A GOOD SUGGESTION FROM TEXAS AS TO THE PROPOSED NEW YORK SOUTHERN EXPOSITION.

West Texas Chamber of Commerce,  
General Offices,

Stamford, Tex., January 31.

*Editor Manufacturers Record:*

We thank you for reprint from the MANUFACTURERS RECORD of January 17, and it is likely that West Texas may desire to take considerable steps in the Southern Exposition in New York City. However, we have not yet heard from anyone in connection with the matter. The West Texas Chamber of Commerce for the past six years has been spending a very large sum of money sending out exhibits to various parts of the United States, and we have achieved very notable results therefrom. We think that the exhibit at New York should also show statistical data on living costs, and should if possible lay plans to dissipate the idea that the climate of parts of the South is debilitating and unusual in the summer. Also we think it would be a splendid idea to run several excursions from different parts of the South to New York, stopping over at various places enroute, say at points in the Piedmont manufacturing belt in the South, also at Washington, Baltimore and Philadelphia.

It would be a good idea, in our opinion, to operate say four or five special trains out of the South, starting at different points. We would suggest that the special train from the Southwest territory should be made up at Sweetwater, Tex., and that persons from all parts of West Texas could join this train either at Sweetwater or at points between Sweetwater and Amarillo and Fort Worth or between San Angelo and Fort Worth and between El Paso and Sweetwater. This Sweetwater train could complete its complement at Fort Worth. Other trains could possibly be operated out of Florida, New Orleans, Charleston and say Memphis and possibly Birmingham.

The West Texas Chamber of Commerce for several years has operated special excursions for those of its members who desired to make the trips. We operated a special train all over Mexico, and also had a special excursion from New Orleans to Cuba and the Panama Canal. It is therefore likely

that if this New York Exposition matter could be built up big enough and attractive enough that we could operate a special train to New York. But if we do so we would want to stop off at Washington, Baltimore and Philadelphia. When in Washington we would want to spend several days visiting points in Virginia.

What do you think of this idea, and do you think the MANUFACTURERS RECORD might undertake to promote it?

PORTER A. WHALEY,  
Manager.

The MANUFACTURERS RECORD heartily endorses the idea of special trains from the South to the New York Southern Exposition, believing that if carried out it would be productive of much good. There are many reasons for favoring such a plan. The running of special trains of Southern people to New York would stimulate the nation's interest in the Southern Exposition and would cause Eastern papers to give increased attention to these visitors and to the Exposition which had drawn them.

Moreover, Southern people themselves would in this way have an unusual opportunity to come in touch with each other, so that people from all parts of the South would have their interests centered in studying the resources and the progress of the South as a whole.

For instance, the representatives from Texas would see illustrations of what the people of other sections of the South were exhibiting in the way of raw materials, or manufactured, or agricultural products. The people of the Central South and of the Piedmont region would in the same way learn more than they now know about what Texas is doing, and what its resources are. These special trains, if they should be run—and we think it is altogether probable that the suggestion having been made the plan will be carried out—should be so arranged that there would be stops at various points in the South, as well as at Baltimore and Washington. Texas people, for example, would have the opportunity of seeing in this way the wonderful textile development in the Carolinas and Georgia and the iron and steel development in Birmingham.

The trips would be educational not only to Texas people, but to all others from the South who joined in them, for there is probably nothing that more completely broadens a man and widens his horizon than travel. In this way he gets an insight into the achievements of other cities and states and individuals which he can never get so long as he stays at home. All the books that he can read will never make so deep an impression upon him as actually seeing for himself what others have wrought and what they are doing.

The suggestion of Mr. Whaley is a good one. It shows that Texas has become immediately interested in the Southern Exposition, and we are quite sure that the exposition managers and the railroads combined will arrange for such trips, the value of which it is difficult to overestimate.

## COMMENDATION FROM OKLAHOMA.

Chamber of Commerce,  
Oklahoma City, Okla., February 5.

*Editor Manufacturers Record:*

Please accept our thanks for the article appearing in MANUFACTURERS RECORD week before last concerning our efforts looking toward the establishment of a textile mill in Oklahoma City.

Just now I would like to take occasion to thank you on behalf of our people for the great big constructive program you are promoting for the South. There is certainly no other agency existing that is doing more for the upbuilding of this great section of America than the MANUFACTURERS RECORD and as for Oklahoma's part, we want you to know that we appreciate your good work.

ED. OVERHOLSER,  
President-Manager.

### AN APPEAL TO PRESIDENT COOLIDGE—

Dispatches from Washington to the daily papers state that you have given instructions to the Tariff Commission to take up for investigation the tariff rates on vegetable oil seeds. No sooner was this announcement made than one large cotton grower in the South who had intended to plant heavily of peanuts, found it necessary to postpone action in regard to growing peanuts and others are in exactly the same situation.

The vegetable oil crops of the South need protection, full and ample, to a far greater extent than the wheat growers of the Northwest, and yet you are wisely suggesting the possibility of a higher tariff on wheat. Western wheat growers are competing not with the pauper labor of the Orient, but with the labor of Canada, and the Argentine; and though the rate of wages in those countries is less than in the United States, there is no such condition of pauperism of labor in contrast with American labor having to meet the labor of the Orient.

By reason of boll weevil destruction the Central South has to some extent been saved from the condition of Northwestern wheat growers, since the boll weevil has resulted in an advance in cotton which helped to save this section from such a disastrous experience as the Northwest is enduring. But it is absolutely essential to the prosperity of Southern farmers that they should turn to diversified agriculture, and peanuts and kindred crops have offered the most hopeful prospect for success.

On the other hand, the large consumers, such as the soap makers and others, have been vigorously fighting to beat down the tariff on these Southern crops in order that they might secure lower raw material out of which to produce their finished products.

**If the Western farmers need a protective tariff, and we are sure they do, then the Southern growers of vegetable oil seed need a protective tariff to a still greater extent, for they must compete with the Orient where the labor rates are anywhere from three cents to ten cents a day.**

The very suggestion that you are going to have the Tariff Commission investigate these rates has raised in the minds of Southern farmers the possibility that the Tariff Commission might lower these rates, and thus destroy the possibility of profit. Moreover, this comes at the very time when the farmers must decide on what crops to plant for the present year; and not knowing what will be the action of the Tariff Commission they may again be forced away from diversified farming into a larger acreage in cotton, which would prove more disastrous to them, if the yield should be in proportion to the larger acreage, than was the large wheat crop of the West to the farmers of that section.

It is earnestly hoped that you may feel justified in recalling the suggestion for a Tariff Commission investigation of the vegetable oil rates, as the very discussion of the subject will create pessimism on the part of Southern farmers, unless it be distinctly understood that you are advocating a higher protective tariff for these interests, just as you are doing for the wheat growers of the West.

In a letter which we have just received from a cotton grower, and to which reference has already been made, he writes: "I have made all arrangements to plant a large (for me) acreage in peanuts this year. Now if there is danger of our losing half of our tariff protection I shall probably be forced at this late date to re-arrange my entire farm program. On their own argument the soap people have no case; all they have is money and influence. I do think there ought not to be large differences at this time in the tariff schedules."

Believing that you are just as deeply interested in the prosperity of the Southern farmers as of the Western wheat

growers, we press this matter upon your earnest consideration in the hope that you will let it be distinctly understood that you are just as heartily in favor of protecting the farm products of the South by an adequate tariff, as you are in favor of protecting the wheat growers of the West in the same way.

After dictating the foregoing we had a visit from a banker farmer of Georgia who reiterated very strongly all of the foregoing points. His section of Georgia has been hit very badly by the destruction of the cotton crop. The people have known nothing but the raising of cotton. They are struggling under a load of indebtedness which he says is greater in nearly every case than the value of their property. The banks are carrying heavy burdens. These people have been turning toward the raising of peanuts and other crops of that character; but now they too have become suddenly greatly disturbed by the reopening of the question as to the tariff on these products of the South. None of them know what to do. Some of them have been planning to raise peanuts, but they do not now know whether to do so or not. The very raising of the question of the possibility of lowering the tariff on these diversified farm products of the South has created great alarm, and may do very serious harm to the entire agricultural situation of the South.

We trust you will be as prompt to assure Southern farmers of your desire for an ample protective tariff for them as you have been to make known your efforts in that direction for Western wheat growers.

### LETTING IN WIVES AND HUSBANDS.

THE American Defense Society has issued the following: "A bill has been introduced by Senator Copeland, of New York, calling for the admission of any wife or husband of an American citizen, irrespective of quota limitation. At first blush this appears to be both reasonable and humane, but incidents in our past history indicate that any such measure, passed without suitable qualification, will have effects entirely at variance from the Senator's intent. It will promote undesirable kinds of 'matrimony.'

"When Chinese women were excluded except as wives of American citizens, American citizens were procured, for a very reasonable consideration, to marry them and to remain married until the admission of the woman had been effected. The divorce customs among certain races are very rapid and quite informal, also American divorce laws in many states are easy. All charitable agencies will likewise attest that we have already a large and well known class of disappearing husbands.

"If we allow such admissions outside of the quota, the registration requirements for aliens called for by Secretary Davis will be absolutely essential for the purpose of deporting the 'temporarily married.'"

### PRAISE FOR FLORIDA.

Community Advertising Department  
of the  
Associated Advertising Clubs  
of the World

Don E. Mowry, Chairman Exhibits Com.,  
Madison, Wis., February 10.

Editor Manufacturers Record:

Thank you very much for the MANUFACTURERS RECORD of January 24, containing the article on community advertising. I have read it with great interest and profit. Florida is going to put some things over in the next few years that will startle California and then the rest of the country will follow suit.

DON E. MOWRY.



## Woodrow Wilson.

Birmingham Clay Products Co.,

Birmingham, Ala., February 8.

*Editor Manufacturers Record:*

I have just read your beautiful tribute to Woodrow Wilson in the current issue of the MANUFACTURERS RECORD, and wish to express to you my gratification over the way you handled it.

However, it was no surprise to me to find you just, kind, tender and appreciative of the wonderful genius and character of our great War-Chieftain, from whom, in the flesh, honesty of conviction and love of the traditions of the founders of our nation as you construed them, compelled you to differ as to some of his policies.

Such magnanimity and courageous justice is indeed a credit to your heart and mind, and finds a responsive throb throughout the world.

Woodrow Wilson's high and unique place is fixed and the annals of history will preserve it in imperishable manner. His ideals, which failed of full realization through the frailties of human nature, are none the less lofty and sublime,

and will be an inspiration to generations yet unborn to "carry on" in lofty aspirations toward the goal of universal peace, which only the Prince of Peace can and will establish, when He returns in glory to the "throne of His Father David."

Let us live and strive and pray for the hastening of that blessed day!

JOHN W. SIBLEY,

City of Mobile,

February 9.

*Editor Manufacturers Record:*

I have read with great pleasure and profit your leader on Woodrow Wilson. It is profound in substance and elegant in diction.

This structure which this great man attempted to rear, will be remembered more for its beauty, than its strength, and his name will be placed among the immortals more because he was supremely brilliant than for the reason that he was supremely great, but it will be placed there.

R. V. TAYLOR, Mayor.

### URGING SOUTHERN PEOPLE TO BUY SOUTHERN BONDS.

THE recent editorial in this paper suggesting that Southern bankers and business men generally should do all in their power to encourage Southern people to buy local municipal securities has attracted wide attention. A Southern banker, who had recently purchased a considerable block of municipal securities, said to the writer that he had no idea of undertaking to place any of the issue among local people but would sell the entire issue which he had purchased to Northern and Western people. "For," said he, "money in this community commands a much larger rate of interest than that of these bonds and it would be a waste of time, I fear, to undertake to sell the bonds locally." Notwithstanding this view, local people voluntarily within a few days began to purchase these bonds from the banker to a very considerable extent. The banker had not believed anybody in his community would buy them, but he found to his surprise that a great many people were anxious to buy.

If Southern bankers would make a regular business of handling the securities of their communities, whether issued by cities or counties or by the state and urge local people to buy, they would gradually develop a home demand and the Southern people would be the owners, to a large extent, of their own bonds. A habit of thrift would thus be cultivated and an interest and a pride in the success of local securities established.

As it is now, most Southern securities are sold in the North and West where the rate of interest is lower than in the South, and every year there is an annual drain on this section to pay the interest on these bonds; whereas if the money now sent outside for interest could be retained at home, it would add largely to the wealth of the community.

It is well to invite outside capital to come into this section and take part in its development, but it would be still better if Southern people themselves were stimulated to the use of their own money for investment in their own securities and in development of their own industries. The South is now annually drained of hundreds of millions of dollars for the payment of interest on railroad securities, and industrial and municipal and state securities owned elsewhere. This section gets the benefit of the capital invested, but it would be still more prosperous if it used its own capital for this development work instead of wasting so much of this capital, as it is doing, in stock and cotton gambling and in the thousands of "wild cat" oil and other enterprises, which are so

often promoted for the express purpose of robbing the people of their money.

Commenting on the editorial to which we have referred, Harry F. Fromme & Company of Jacksonville, general agents of the Southern Surety Company of Des Moines, Iowa, write as follows:

"In your January 11th Daily Bulletin I have read the article 'Southern Bankers Should Encourage Southern People to Buy Local Municipal Securities.'

"First I desire to say that the people of the South should thank you for the suggestion. I think it is a wonderful move to make and I sincerely hope that the banks will encourage the idea and while it is indeed unfortunate that some of the managers of the larger banks follow a short-sighted policy, encouraging keeping money on deposit and not purchasing securities, I trust that the movement may be started and gain such momentum by encouragement of the broad-minded bankers that the absorption of Southern bonds by local investors will create a larger and better market for improvement bonds of the South.

"We maintain a mailing list of 625 names of contractors, architects, and engineers and others interested in the construction business and we would like to have the privilege of reprinting this article, giving the MANUFACTURERS RECORD credit for it, and making an enclosure of it at several of our mailing times."

### RAISING COTTON IN VIRGINIA.

THE MERCHANTS SUPPLY COMPANY of Danville, Va. in a letter to the MANUFACTURERS RECORD says:

"There will be a great deal of cotton grown in this immediate section from now on as it seems greatly on the increase and until the last year or so none worth mentioning was ever heard of in this section, the farmers specializing on tobacco as their money crop."

It may be worth while in this connection to remind our readers that during the Civil War when some of the counties on the Rappahannock River were compelled to raise everything which they consumed for food or clothing, they raised cotton with considerable success. In those days nearly every farmer, in quite a large part of that region, raised sufficient cotton to supply the needs of his own family. The cotton was picked by hand, carded by hand, spun on the old-time spinning wheels and woven into home-made goods for the members of the families as well as for the slaves. Possibly some of these counties may again take up cotton raising.



## American Thought and Knowledge Should Be National, Not Sectional—Some Cogent Reasons Against the Zone Postal System for Publications.

HON. CLYDE KELLY, Congressman from Pennsylvania, has been an ardent opponent of the present postal zone and rate system. In a speech on the subject before the Committee on Post Offices and Post Roads he said:

"Finally, let me say that this country has been made possible because information highways were provided by the Postal Service over which knowledge might pass with the least interference possible. It can not live and grow on the idea that these publications are outlaws to be driven from the highways into the byways. Already great injury has been inflicted by the postal rates of the revenue law of 1917. For a great number of valuable publications the comfort of this measure will come too late. It will be like a pardon after execution. They have disappeared—destroyed or merged into some other publication.

"The power to tax is the power to destroy," said Chief Justice John Marshall. But because Congress has the power to tax newspapers and periodicals out of business is no argument for the use of that power. Oppressive taxation is a most effective method of destroying the press whose freedom is guaranteed in the Constitution."

In the course of his speech Mr. Kelly quoted from a letter from former Postmaster General Hubert Work; written at the time he was in office, in which he suggested that an increase in parcel post rates to at least approach the cost of handling is under consideration, and he adds:

"The postal rates on the two classes of mail cannot be viewed from the same standpoints entirely. The periodicals have an educational and news value, while the parcel post contributes chiefly to business transactions. Although the reduction contemplated in the Kelly bill relates only to the rates for advertising matter, it is recognized that they carry with them educational features."

Discussing the essential relation of our Post Office System to the very existence of this country, Mr. Kelly said:

"Without the Postal Service, America would be a melee of warring nations, a Balkan of enmities, a jungle war for survival."

And he quotes the Continental Congress as declaring: "Communication of intelligence with frequency and dispatch from one part to another of this continent is essentially requisite to its safety."

"Today," said Mr. Kelly, "education through easy communication of ideas to the people of every community in the land is essentially requisite to American unity, prosperity and progress.

"That education and communication of common ideas in America has come almost solely through the newspapers and periodicals which have become an inseparable part of our national life. Henry Ward Beecher well said, 'Newspapers are the schoolmasters of the common people, a greater treasure to them than uncounted millions of gold.' Half the readers of America read nothing else. The same publications circulate in New York, and California, Minnesota, and Florida. The magazine read in Washington is carefully perused by the American who lives under the Arctic Circle in Alaska.

"This successful welding of a great nation through the cementing force of common ideas communicated through the press is the result of a determined Government policy. Congress declared in legislation that the unifying effect of a national press justified the granting of low postage rates. This action was for the direct encouragement of the distribution of newspapers and other periodicals to every part of the country.

"George Washington had visioned the benefits of such a policy so clearly that he urged in 1789 that newspapers and other publications be sent through the mails without charge of any kind.

"Thomas Jefferson declared that the Post Office Department should not be conducted from the 'standpoint of revenue, but from the standpoint of service to the public.'"

The entire address of Mr. Kelly was an illuminating discussion of the value of newspapers and magazines in broadening the spirit of nationalism, a point which the MANUFACTURERS RECORD has often discussed. It is exceedingly desirable, for instance, that newspapers and magazines published on the Atlantic seaboard or the Gulf coast should circulate as freely as possible through the Central West and on the Pacific Coast, in order that the dwellers in these sections may know what the East and the South are thinking and doing. It is equally important that publications of the Pacific Coast should circulate freely across the West into the South and the East for the same reason.

We are already too sectionally inclined in our thinking. New York people largely think in terms of New York only, and know very little about the great West or the still greater South. They are provincial to the extreme, because they do not read one half as much Southern and Western literature and newspapers as they should. The South and the East generally do not know as much about the Pacific Coast as they should know. The activities of one section if widely known by other sections, would stimulate and create a broader national interest. The widest possible circulation of newspapers and magazines, therefore, is the best educational influence that can be created for developing a national spirit which relates not only to the political affairs of the country, but to its material and religious affairs.

How many people in the East, for instance, know what California and Washington and Oregon are thinking about public questions, or what they are doing in material affairs? How many people of the Pacific Coast are well informed as to what the East and South are doing in educational work or in material development?

These are the thoughts which Congressman Kelly evidently had in mind in his broad discussion of the whole subject. The limitation of space makes it impossible for us to give his speech in full, and we can only pick here and there from a few outstanding statements made by him as follows:

"The first law on postal rates for newspapers and periodicals provided a rate of 1 cent per sheet for 100 miles and 1½ cents per sheet for distances over 100 miles. In 1851 newspapers were ordered distributed through the mails free within the county of publication, and a graduated scale of rates was fixed outside the county.

"Under this plan the subscriber paid the postage. It was in the day of the stage coach, pony express, and mounted mail carriers, but still the rates were not as high as those which must be paid today under the revenue law in force.

"The rates of 1851, reasonable as they were in comparison with the present rates, were permitted to remain but a single year. There was universal objection from the people, and in 1852 the zone rates were repealed and a cent a copy for any distance was substituted. In 1874 the postal rates for newspapers and other periodicals were fixed at 2 cents a pound for any distance. Then in 1885 the rate was made 1 cent a pound, and remained at that figure until the passage of the revenue act of 1917, the measure which provided for raising funds for the World War.

"In the fall of 1917 without any public hearings before

either the Post Office and Post Roads Committee of the Senate or the House, Congress passed a bill which established the present zone system as a war-revenue measure. This law became effective July 1, 1918, by Order No. 1458, having four regular advances on that portion of a publication devoted to advertising.

"That law overthrew the policy which had been in force for 65 years and provided for a zone system of eight zones. It established a new principle when it provided for different rates upon the news and the advertising portions of newspapers and other periodicals.

"There is not involved just now the problem of the zone system for newspapers. I do not believe in that system, for I believe it means breaking up the country into sections, and is a blow at national unity. The founders of this nation who welded the thirteen Colonies into one Republic feared greatly that the empire they had constructed might be too wide and vast to be enduring. Their fears were without foundation only because there developed new methods of communication and a national press which carried common ideas to all parts of the country. A uniform postage rate for the newspapers and periodicals of America annihilated the distance between the boundaries of America, and thus a vastly greater territory than was dreamed by the founders of the nation was welded into one united country.

"But that is not the question now. The one issue involved in this measure is the wisdom and justice of scaling down the rates fixed in the revenue act of 1917.

"In the first place, those rates were forced as a war-revenue measure, and they never could have been written into law save under whip and lash as a method for securing funds for the prosecution of the war against the Imperial German Government. Even under such conditions, there was such doubt as to the policy involved that it was provided that the rates should not go into effect for a year after the passage of the measure so that revision might be made.

"The individual sender gets the advantage of a flat rate of 4 cents a pound any distance. He also sends in a separate package, which requires the Postal Service to pay the cost of collection, stamp cancellation, sorting, and handling.

"The publisher, on the other hand, must pay a rate of from 5 to 10 cents a pound on the advertising matter even though he relieves the Postal Service of the expense of collecting, sorting, and delivering on board the mail car.

"Such a condition is absurd and should immediately be corrected. From every standpoint of common sense the publisher should be given a more favorable rate than the individual who sends a single copy through the mails.

"In mailing newspapers to foreign countries the same absurdities in rates are in evidence.

"Any newspaper or publication of the second class can be sent under separate wrapper to a foreign land at the rate of 4 cents a pound. I can mail a newspaper here in Washington addressed to a city in Japan and it will be carried across all eight zones of the United States and across the Pacific Ocean for less than it costs the Washington publisher to mail a copy to his subscriber in California. Distance is eliminated for the readers of American newspapers in foreign countries, but there are high barriers for readers within the United States. Such inconsistencies in rates mean that New England publishers could save money by mailing their newspapers to subscribers on the Pacific coast through the Canadian postal system.

"I am a believer in parcel post and have advocated it from its inception. But I do not believe that a national press should pay higher postal rates than potatoes. I believe carrying news is just as important a function of the Post Office as carrying butter and eggs.

"In any case I do not consider that this question hinges

entirely on the profits to be made from the second-class mail. The newspapers and periodicals help to promote education, inspire Americanism, and stimulate a united public mind. They are books, pulpits, platforms, and forums in one.

"The rural free delivery is a service which is very expensive and which means a direct loss of many millions; but because there is a vital value in enabling farmers to keep in touch with their friends and relatives, to read publications which keep them abreast of current events and to dispel the isolation of rural existence, there is no demand for the discontinuance of this service.

"The first letters to Alaska were delivered at a cost of \$450 per letter; but those pathfinders in the new American empire were kept within the range of communication through the post office, and no regard was paid to the cost of that particular service.

"There is a public benefit in the continuous dissemination of information to the people of America. Without it free institutions can not long endure.

"There is a specious argument being made that these excessively high postage rates apply only to the portion of the periodical devoted to advertisements and that reading matter goes at flat rates.

"Such a plea would argue that the advertising and reading matter are separate and distinct. The fact is that there could be no reading matter without the advertisements.

"The average newspaper publisher pays more for the white paper than he receives in subscriptions. He could not supply the news, editorial articles, pictures, and other informational and educational features without the advertising revenue. A single great press association spends \$5,000,000 a year to gather news of the world for its members.

"It costs the newspapers of this country at least \$10,000,000 a year to cover the national news in Washington. Without this expenditure it would be impossible under present conditions to inform the American public as to the conduct of their own Government.

"The great trade papers and reviews dealing with certain phases of industry, art, literature, etc., would be impossible to produce were it not for the advertising columns. The advertiser makes possible the circulation of the medium of information which helps to stabilize conditions and perpetuate American institutions.

"It is foolish to argue that advertisements have no educational value. The Hughes Commission, in its report of 1912, states that 'The amount of space given to advertising is no criterion of the educational value of a magazine.' The advertisements carry to the public the news of every advance in industrial achievement. They chronicle every step in the upward climb of mankind to secure new comforts and conveniences. They light the fires of ambition in the minds and hearts of countless Americans and widen the horizon of every reader in the land. They have helped the manufacturer to appeal direct to the consumer, resulting in standardized production which has made America the foremost commercial nation.

"The advertising pages are business highways of the nation. Would you tax only those who use the waterway or roadway, because perchance they secure a direct benefit from it? Not a sale can be made nor a pound of goods moved without communication between buyer and seller and the interchange of information. The whole life of the country depends upon its facilities for intercommunication.

"Second-class matter is the fountain source of first-class matter upon which the Government reaps a handsome profit. It is a selling service for the Post Office Department, but it receives no commissions and apparently very little credit for developing business.

"Not an activity of the Postal Service but is freely and widely advertised in the press. Civil-service examinations, parcel-post rules, postal-savings plans, uncalled-for letters,



and a host of other messages of the department to the people are carried without charge. One circular letter without postage sent to the patrons of the Post Office Department would cost several million dollars. Material for a hundred circular letters is carried every year into almost every home in America without the cost of a single penny."

### AN EXAMPLE WHICH EVERY COLLEGE AND UNIVERSITY SHOULD FOLLOW.

**N**O student who violates the prohibition or narcotic laws will be either graduated or promoted, according to an edict issued with the unanimous sanction of the forty-two members of the faculty and instructional corps of the Philadelphia College of Pharmacy and Science.

This action, described as a concerted movement for law enforcement by those who are "custodians of a great public trust," was made known in a statement given out by the Drug Trade Bureau of Public Information, Newark, N. J., of which the president is Robert P. Fischelis, dean of the New Jersey College of Pharmacy.

So far as known, this is the first declaration of its kind yet made to meet what is styled "an insistent situation."

"At a Student Forum held recently by representatives of a large number of Eastern universities and colleges," says the statement, "complaint was made by the students themselves that did not know where their faculties or government officers stood on the matter of law enforcement.

"The faculty of the Philadelphia College of Pharmacy and Science have long been teaching and advocating law enforcement to the classes, but had never previously taken up the matter for concerted action.

"The students have been officially made acquainted with the action of the faculty and have been notified that no student will be recommended for promotion or for graduation who is found to be a law violator in connection with anti-narcotic or prohibition regulations."

A formal resolution adopted by the Philadelphia faculty follows:

"**RESOLVED**, That as good citizens we, the members of the faculty of the Philadelphia College of Pharmacy and Science, take a stand for law observance and for law enforcement, and that we pledge observance, specifically, of the prohibition and narcotic laws, in connection with which pharmacists and chemists have a peculiar responsibility as custodians of a great public trust."

### WHERE THE DAIRY COW COMES IN POVERTY GOES OUT.

**T**HE advantages of the South for dairying, and the value of such an industry for the South were probably never before so clearly presented as in the article in this issue by Craddock Goins of Milwaukee. The South has greater advantages for dairying than any other part of the United States and nowhere else is there greater need for the development of this industry than in the South.

One of Mr. Goins striking sentences worthy to be iterated and reiterated throughout the South is that "where the dairy cow enters poverty departs."

In many parts of the South dairying on a large scale has long been an important and profitable industry but there are considerable areas especially in the cotton regions where dairying has been very backward. Southern bankers and business men generally in these regions can aid the farmers in developing this industry by moral and financial cooperation.

### A ROMANCE OF RARE MINERALS IN THE SANDS OF FLORIDA.

**A**N inspiring romance of discovery and achievement is presented in an article on the rutile and zircon deposits of Florida, by George M. Chapin, in this issue of the MANUFACTURERS RECORD. At a critical moment, when the minerals rutile and zircon were urgently required for war uses, Henry H. Buckman and George A. Pritchard, after a marvellous adventure in prospecting and testing, applying their technical training to the work, found themselves ready to supply previously unsuspected needs of the Government, to counter developments by the Germans in applying chemistry in warfare. This astonishing "war baby," created by Buckman and Pritchard, is now, in its maturity, supplying the demands of peaceful industry under the management of its new owners.

The most surprising feature of the story lies in the discovery of valuable ores of rare metals in the beach sands of the coast of Florida. It is one more example of the ancient adage that "Gold is where you find it." Likewise rutile and zircon, and many other valuable minerals, appear far from the place where one might be led by *a priori* geologic reasoning to seek them. It pays to be observing, to scrutinize every clay-bed, every gravel-pit, every sand-pit, and every rock-outcrop in one's vicinity. It is well to be curious enough to examine all these things, or to have samples of them examined by some one who knows.

Rutile is not altogether rare, for it exists in pegmatite dikes in Nelson County, Virginia, but there it has to be mined before concentration, which limits both the speed and the cheapness of production. In Florida it is a question merely of scooping up the abundant sand and treating it. Rutile, moreover, is found on the southeast coast of Norway, in feldspathic veins, but here again exists the same limitation of output, and during the war the Baltic Sea was not a place from which the Allied nations conveniently could draw supplies.

Zircon, also, is a product of Henderson County, North Carolina, where a town has been named Zirconia in honor of it, yet Florida possessed advantages in the readily available quantity lying exposed on the surface. It was a remarkable coincidence that from the material hauled from the beach to the mill for recovering rutile, a concentrate of zircon could be won at small additional cost. Zircon is found abundantly in the gem gravels of Ceylon, while the non-magnetic portion of the monazite sands on the Travancore beaches in India consists almost wholly of that mineral. The Brazilian States of Sao Paulo and Minas Gerães yield large amounts of the mineral baddeleyite, which is pure zirconium oxide, far richer than zircon, but those resources were controlled in Germany, and a domestic supply is always worth vastly more for the development of American industry.

The metalliferous sands of Florida seem to have been derived from the concentration along the Atlantic shore of the heavy minerals carried in the debris of the ancient Piedmont range that has been worn down in the course of ages until all that remains is the rolling Piedmont Plateau. Further contributions of such sands may have come from extensions of that range toward the west where ultimately the Appalachian chain was uplifted. In the middle of the Lower Claiborne, a series of rocks laid down off-shore during Tertiary time, constituting the source of several valuable mineral deposits, is a remnant of sandy sediments alternating with layers of clay. Some of these sands, which are usually clear white, have acquired a grayish tint from the abundant grains of rutile that they contain. It is evident that rutile-bearing beach-sands have been formed in many places and at many epochs.

Study your environment! You may not find rutile and zircon, but you may discover something else that the world wants and will pay for!



## SOME INCONSISTENCES IN THE MELLON TAX BILL.

**M**OTOR vehicles are certainly of far more importance to the business and the pleasure and the health of the country than are dirks and daggers; of far more importance than the so-called soft drinks, many of which are an injury rather than a help to any one who takes them; of far more importance than moving picture entertainments, a large proportion of which are a curse to the country. And yet the things which we have mentioned are among the long list from which it is proposed to remove the special war time taxes, without lessening war taxes on automobiles.

Very properly the National Automobile Chamber of Commerce has called attention to the proposed elimination of taxes on dirks, bowie knives, daggers, circuses, bowling alleys, and other items of which there is a very long list, while no reference whatever is made to eliminating the taxation on motor vehicles and the things connected therewith. Attention is called to the fact that motor car users frequently pay annually as many as fifteen or sixteen separate and distinct Federal, State and Municipal taxes per car.

We have never been able to understand why Secretary Mellon and those who have fathered the new tax bill, or bills, could see any justification for cutting the taxation on bowling alleys, and moving pictures, and fountain syrups or soft drinks. None of them can by the farthest stretch of the imagination be counted as of real value to the country. Some of them furnish a certain degree of amusement, but the moving picture business, especially, is more harmful than helpful. It is developing the emotional side of human nature to an extent that is dangerous; and while there are some possibilities of great good in moving pictures, the industry as a whole is neither helpful nor instructive. The people who attend the movies are not in the slightest degree kept from attendance by reason of taxation, or if they are the number must be small, because the attendance at movies is entirely too large and a vast amount of money is wasted in this way without helping the morals or the educational development of the people.

There are a lot of other things on which it is proposed to reduce, or eliminate the taxation; but essential things like motor vehicles and accessories must still, unless some amendment is adopted, continue to bear the heavy burden placed on them by war taxes.

And in this connection it is worth reminding our readers that the war taxation on newspapers still stands as a heavy burden on them, and adds to the cost of all the literature which the public secures from the printing press. No movement has been made in this taxation bill to remove this burden from the newspapers; but circuses, bowling alleys, bowie knives, dirks and daggers, and various and sundry things equally as unnecessary to the public welfare are to have the taxation eliminated. This feature of the tax bill is about as unwise as was Mr. Mellon's insistence upon the adoption of a constitutional amendment against tax free securities, which fortunately Congress has for the present refused to adopt.

## "MIXED" SCHOOLS.

Southern boosters of Federal control of public schools should take a look at some of the pictures used in Michigan and Rhode Island newspapers where the schools are very much "mixed."—*Jacksonville Times-Union*.

The "mixing" to which the *Times-Union* refers, bad as it is, would not be so bad as would be the complete domination of education in this country by a Department of Education, which, once in power, would seek to control all educational work from the selection of the books to be used to the methods of teaching adopted in every public school in

the land, gradually extending from this to the control as far as possible of the colleges and universities.

How intelligent people, seeing the danger of such a situation, can possibly favor the establishment of a Department of Education with \$100,000,000 a year at its command to distribute throughout the country in order to get control of education, we are at a loss to understand. It is only another illustration of the tremendous power of money, even though this money must first come from the taxpayers of the country before it is poured out from Washington into the channels which would control education.

## BIG CAR AND LOCOMOTIVE SHOPS FOR SOUTHERN RAILWAY.

**T**HE details given in this issue of the big locomotive and car shops to be established by the Southern Railway at Birmingham is one of the most significant industrial movements of the day. It means that this section is at last to get the benefit of great locomotive shops which marks one more great advance step for Southern development.

## ONE OF THE FINEST TRIBUTES THE MANUFACTURERS RECORD EVER RECEIVED.

**M**R. F. Y. PONDER, an invalid business man writing from the Baptist Sanatorium of El Paso, Tex., to this paper, said:

"For over two years the MANUFACTURERS RECORD has been a regular weekly caller. Monday was the only day to look forward to with eagerness. If words could do it I would tell you how much I appreciate your kindness in sending me the paper so long. It is not the paper in the common acceptance, but rightly an exponent of a deathless spirit of optimism, progress, development, courage, emancipation and a record of triumph and achievement.

"It is a great educator and reading of it alone will make one more truly educated in the everyday sense than a course in any university. It is an embodiment of the living, throbbing world and particularly the Living Heart of the unconquered and unconquerable spirit of Dixie. Its banner should be the Stars and Bars and the Banner of the Conquering Christ.

"I love it and all the things for which it stands and the men who have the courage to contend for the principle for which it so earnestly contends. Some day I hope to be able to take part again in the life it represents."

[From Daily Free Press, Kinston, N. C.]

## SECTION GETTING ADVERTISING NOW IN ALL PARTS OF U. S.

Although only a week has passed since a full-page advertisement appeared in the MANUFACTURERS RECORD which marked the beginning of the nation-wide advertising campaign that the Eastern Carolina Chamber of Commerce is fostering, dozens of inquiries have been received by the headquarters of this organization in Kinston. The requests for literature have come from Colorado, Texas, Georgia, West Virginia, Maryland, Kentucky and North Carolina. "Every mail brings some request for literature about this section of the State," Secretary Newel Bartlett stated this morning.

The moral of the foregoing from the Kinston Free Press is so obvious that it need not be further emphasized.

# Shall Publicity Work Be Maintained by Taxation?

The article by W. B. Powell, Secretary of the Lake County Chamber of Commerce, Tavares, Fla., favoring the maintenance of commercial organization work through public taxation, in the MANUFACTURERS RECORD of January 24, and the editorial commendation, have attracted widespread attention throughout the country. The subject has been discussed pro and con in the newspapers and in commercial organizations. Many letters to this paper have heartily commended that plan, while some have taken the position that the commercial organizations themselves should not be supported by public taxation, but that the publicity work done through them or by them should be so maintained. This point is an interesting one.

We do not believe that it would be wise to lessen the enthusiasm of individual business men in the maintenance of commercial organizations entirely free from political control, but their work can be of comparatively little value to the community in contrast with what it should be, if they are without money with which to carry on a broad publicity campaign. This money certainly, it would seem, should come from taxation since in that way every individual in the community helps to bear his share of the publicity work which relates so directly to the progress and the prosperity of the community.

We are publishing a number of the letters which have been received discussing the various phases of the proposition as made by Mr. Powell, and commended editorially by the MANUFACTURERS RECORD.

## Favors Publicity by Taxation.

Monroe Chamber of Commerce,

Monroe, La., February 4.

*Editor Manufacturers Record:*

Acknowledging your letter with the article entitled "Shall Commercial Organizations Be Supported By Public Taxation?" will say that I have read this with great interest and believe that it covers the ground thoroughly.

For two or three years I have been reading and studying this subject and am in hearty agreement with all the sentiments expressed in this article, which I think is very ably written.

S. M. COLLINS, Secretary.

## Approves the Suggestion.

Sheffield-Muscle Shoals Chamber of Commerce,

Sheffield, Ala., February 8.

*Editor Manufacturers Record:*

We have read with interest the article in your letter of January 29, regarding maintenance of commercial organizations through public tax issue. The idea as expounded appeals to us as being one of the most logical we have had called to our attention.

We desire to thank you for your interest in the matter and in sending this reprint to us.

A. M. EATON, President.

## Sioux City Chamber of Commerce Commends the Plan.

Sioux City Chamber of Commerce,

Sioux City, Iowa, February 6.

*Editor Manufacturers Record:*

We are very much interested in your advocacy of financing commercial organizations through taxation and are giving your story publicity through our official publication.

JOHN D. ADAMS,  
Assistant Secretary.

## When and Where Taxation Can Be Wisely Used for Commercial Organizations Open to Discussion.

Macon Chamber of Commerce

Macon, Ga., February 4.

*Editor Manufacturers Record:*

We do not believe that civic and commercial organizations should be supported entirely by taxation.

We do not believe that firm and individual membership should be abolished and the man-power of these organizations reduced to the paid employees.

We do believe that certain funds for specific purposes which are now raised by public subscription should be secured by taxation.

In Florida the principal activity of the average organization is advertising; in another state it is agriculture; in another state it is commercial development. In other words, the activities of civic and commercial organizations are influenced almost altogether by local conditions.

Most of the organizations in Florida are receiving publicity funds derived from taxation and have been for many years.

City and county appropriations in other states are used for various purposes. The practice is old, but not in any sense general.

Community organizations are compelled to be very conservative in matters which involve political activity or political influence.

You have reopened the discussion of a subject which has been considered at many conventions of chamber of commerce executives. There are many sides to this question, many factors to be considered. It is another case where it is impossible to adopt a general policy which fails to consider the great number and diversity of local conditions. You can not grow corn in Florida by the same method that would be used in Georgia, and in Georgia, the method is very different from the one you will find in Michigan.

F. ROGER MILLER,  
Business Manager.

## Food for Thought.

Fernandina Chamber of Commerce,

Fernandina, Fla., February 4.

*Editor Manufacturers Record:*

Enclosed find express money order for \$5.00 for which kindly send me 100 copies of the taxation editorial reprint. Don't know if it will do any good, but some great man said:

"He is great who feeds men's minds, and gives food for thought."

There is some food in this article, at least for discussion.

Have not forgotten you, and hope some day in the not far distant future to be able to get into an advertising program with your wonderful paper.

E. W. BAILEY, Secretary.

## Wants People to Study the Suggestion.

Madison County Chamber of Commerce,

Canton, Miss., February 2.

*Editor Manufacturers Record:*

We have your reprint headed, "Shall Commercial Organizations Be Supported by Public Taxation?" and would ask that you send us 25 copies; also that you send Hon. John R. Anderson, care of House of Representatives, Jackson, Miss., 50 copies, letting us have statement covering cost of both lots.

B. L. ROBERTS, President.

### Favors Tax for Publicity But Not for Support of Commercial Organizations.

Blytheville Chamber of Commerce,  
Blytheville, Ark., February 4.

*Editor Manufacturers Record:*

I am enclosing our check for \$2.50 for which please send 50 copies of the reprint from the issue of January 24 regarding town and city publicity.

This is a question, I think, that can well be gone into by every commercial organization, and I will use these reprints to start the thought among our members.

I do not think that commercial organizations should be supported by a tax as this would take away the personal element, and I think would react to the detriment of these organizations by depriving them of the personal service of a large number of the membership who are giving their time, thought and funds to the service of their community through the urge of public spirit and a desire to contribute to the welfare of their respective communities. However, the publicity work of any city, county or state should be paid for by all the property owners equally, and in proportion to the property that each one owns, and this feature of the question is the one that I think should be worked on, and an effort made to secure a publicity tax to take care of this work. When, and only when, this is done will each property owner do his share of the work in advertising his state, county and city, as we will always have with us the fellow who is willing to sit back and reap the reward for another's efforts.

The article the RECORD carried will, I think, go far toward bringing this method of paying for community publicity into being.

J. MELL BROOKS, Secretary.

### Miami Spending This Year \$100,000 Raised by Taxation for Publicity Work.

Miami Chamber of Commerce  
Miami, Fla., February 2.

*Editor Manufacturers Record:*

We noted the articles in the MANUFACTURERS RECORD and read them through, and of course as this city has been following this plan for a great many years and has been one of the outstanding examples of its success, we were very glad to see the publicity given.

Miami this year is raising through this method approximately \$100,000 for advertising and entertainment purposes, which is the largest sum of any community in the state of Florida.

We have answered a great many queries in the past five years upon this subject that have come to us from all parts of the country.

FRED L. WEEDE, Managing Secretary.

### A Timely Discussion.

Lubbock Chamber of Commerce  
Lubbock, Tex., February 2.

*Editor Manufacturers Record:*

Send me 100 reprints of discussions of the support of commercial organizations through taxation. It comes at a most opportune time for us since I have just finished selling my board of directors on the idea and they have instructed me to proceed with the campaign looking to an amendment of our city charter to take care of the situation. At our annual meeting, which comes on the 12th of this month, I am to include that item in my recommendations for the coming year and have invited a very able speaker to discuss the subject for our membership.

CURTIS A. KEEN, General Secretary.

### Dues from Members Should Pay Salaries and Other Overhead Expenses.

Orlando Chamber of Commerce  
Orlando, Fla., February 2.

*Editor Manufacturers Record:*

Unquestionably you are working along proper lines in your suggestion that publicity funds be derived from public taxation rather than public subscriptions. For several years the Orlando Chamber of Commerce has been the recipient of funds derived from a one mill tax, but almost a year ago our revenue, by almost unanimous vote, was increased to two mills, thus proving the attitude of our citizenship toward this matter of financing publicity.

We most strongly feel that the actual chamber of commerce organization should not be so supported, but that dues from members should pay salaries and other expenses incident to the conduct of the modern chamber of commerce. This permits the devoting of every cent of public moneys to the benefit of the public. Thus the citizen who is not personally favorable to the personnel of the chamber of commerce cannot complain of his contribution being used for the support of those officials.

We are interested in noting that practically all of the comments in the excerpt you send are by Florida commercial secretaries. May I be permitted to say that you are quoting from our most experienced and highly esteemed secretaries? If we can give you any particular information not here included, please feel free to call upon us.

S. KENDRICK GUERNSEY,  
Executive Secretary.

### A Movement Which Means Much to Commercial Organizations.

Brunswick Board of Trade,  
Brunswick, Ga., February 1.

*Editor Manufacturers Record:*

Inasmuch as Brunswick is inaugurating a movement whereby its commercial organization may be supported by public taxation, I would appreciate very much one hundred copies of the report from the MANUFACTURERS RECORD of January 29.

We are inclined to believe that this is the solution of a problem that has vexed chambers of commerce and boards of trade for many years, and we are delighted to learn that you are championing a movement that ultimately will mean so much to the commercial organizations of the United States.

FRED G. WARD,  
Managing Secretary.

### Common Sense and Sound Logic.

Beckley Chamber of Commerce,  
Beckley, W. Va., February 1.

*Editor Manufacturers Record:*

Let me thank you for your letter enclosing a reprint of the article "Shall Commercial Organizations Be Supported By Public Taxation?" and accompanying editorial appearing in the MANUFACTURERS RECORD of January 24, and say that the article and editorial were first read in the RECORD, and reread with renewed interest in the reprint.

As you say, it is "a somewhat revolutionizing suggestion," but it is good common sense and sound logic, and I shall take pleasure in bringing to the attention of the members of this organization at its next meeting, and in the meantime I would thank you to send us 50 copies of the reprint with bill to cover.

W. A. JAMES, Secretary.



## A Strong Presentation from a Thriving Texas City.

Amarillo, Tex., February 8.

Editor *Manufacturers Record*:

I presume from its editorial comment in the January 24 issue that the *MANUFACTURERS RECORD* will continue to advocate the publicity tax plan, and I am enclosing an article with the hope that it may be of some use to you.

Amarillo's publicity work has been supported by taxation for ten years, and the movement is gradually spreading over Texas, though there has been no organized effort in its behalf.

Amarillo was one of the first cities of the nation to adopt this method, and its Board of City Development has functioned as a chamber of commerce for more than ten years. Plainview, San Angelo, Sweetwater and Cisco have since adopted the plan, and it is being considered by El Paso, fifth city of the state.

In all places where it has been established, the tax plan has the approval of the community as a whole. Only one effort has been made to overthrow it; that at San Angelo, where after a trial of two years, its retention was favored by a vote of 8 to 1.

Unlike Florida, however, Texas laws do not provide directly for a publicity tax. But a law passed in 1913 indirectly gives that privilege to cities. That law empowers cities over 5000 to write their own charters, subject to the provisions of the general statutes, and to enact that charter into law by a vote of its citizens. And the general statutes *do not prohibit* use of municipal tax money for publicity purposes.

Shortly after passage of that law, Amarillo voted a new charter, mainly for the purpose of changing from an aldermanic to a commission form of government. But in drafting that charter, many other civic matters were considered. One of these was the Chamber of Commerce.

At that time the chamber was in the normal state; that is, "in a hole." Investigation showed that salaried and professional men supplied the bulk of its income, with very little contributed by large property owners who would benefit most from the town's growth.

Recognizing that the undeveloped resources of this section needed adequately financed publicity work, the charter committee adopted a suggestion of Seth Holman, newspaper man, that necessary funds be provided through taxation. Such a plan was untried, so far as Amarillo knew, but it was approved by the voters and later an ordinance defining the duties, functions and powers of the Board of City Development and its members, and providing for its support, was passed.

Duties of the board were defined as follows:

"The Board of City Development of the City of Amarillo shall have general supervision over all matters pertaining to the work of the usual chamber of commerce or commercial club, such as the legitimate fostering, exploitation, encouragement and development of the agricultural, stock, industrial, manufacturing, jobbing, distributing and wholesale and retail commercial resources, the securing of desirable immigration, encouraging social and commercial intercourse, improving transportation facilities, desirable publicity, more and better highways, or any other matter that has for its purpose the upbuilding and growth of Amarillo or benefit of its citizens."

Under these instructions, the Amarillo Board of City Development, in co-operation with the city administration, has functioned efficiently and purposefully for over ten years; it today has not only the tacit support but the active backing of Amarillo citizens.

The 15 directors are appointed by the city commission and serve without salary. They are empowered to employ a secretary and such assistants as are needed. The prestige of being a city official has been a spur to the directors, and

they are active workers. If one is not, he is automatically removed.

Each director is given a definite sphere in which to work, and incidentally, that sphere is the one which has the most direct bearing on his own business.

Transportation and rates, trade extension, industries, civic improvement, publicity, agricultural development, reception and entertainment of prospective investors, obtaining and handling of conventions, immigration, betterment of highways and beneficial legislation are among the assignments. Each director is empowered to appoint a subcommittee of ten members to assist him. Since a director must be active, he naturally appoints men who also will work. That means that 175 men, in addition to the salaried personnel, are giving personal effort to the upbuilding of Amarillo. And that's a pretty fair average for any chamber of commerce to shoot at.

Adequate finances have enabled the board to maintain a high type of employes to carry out its policies and attend to details. And this has been done without the work becoming burdensome to any public spirited citizen.

Although allowed two mills on the \$1 valuation—2 cents on the \$100—the board has never used one-half that amount. A man paying taxes on \$5000 contributes only 50 cents a year to the support of the work. One paying on \$50,000 contributes only \$5. Such a man, if he had any public spirit at all, would be paying \$10 to \$20 a month to the chamber of commerce.

As to results:

Since its founding 33 years ago, Amarillo has doubled in population every ten years. It was first a "cow town." Then it accumulated railroads, with outlets in seven directions, and became a "railroad town." These outlets gave it dominance as a distributing point over a radius of 200 miles.

Cattle maintained 1456 persons here in 1900, when it was the largest cattle shipping point in the world. Railroad payrolls shoved the population to 8000 in 1910. Distributing houses and the beginning of agriculture came during the next decade and doubled that total. The gradual enlargement of all lines of endeavor has now boosted Amarillo beyond the 20,000 mark. The city takes especial pride in being branch headquarters for several large farm implement houses, as it was these that gave Dallas its start toward the premier-ship of Texas cities.

In keeping with this rapid development, Amarillo is today the best lighted city in Texas.

It is ranked as the cleanest city in Texas.

It has the largest municipal auditorium in Texas, more paving and other public improvements than any city in its class in the state.

It entertained 33 conventions during 1923.

In all these things the Board of City Development has taken an active part. For the immediate future, Amarillo sees industrial and agricultural enlargement because of two developments, extension of the cotton producing territory northward and discovery of natural gas.

Though farming has been successfully carried on for more than a decade, less than one-fourth of the land on the Great Plains is being tilled. Ten million acres await the plow. Cotton at present prices will pay for a farm in one year. That one consideration is bringing thousands of settlers into the Amarillo territory.

The world's largest gas field is at Amarillo's door. Eighteen billion cubic feet, equivalent in heating value to 900,000 tons of coal, is now available daily. In cost, this gas equals coal at \$1 a ton. As in agriculture, only a small area has been developed.

Giving due publicity to those assets is a full time job. It is too big a job for a voluntary chamber of commerce, with the lost motion that attaches to most such organizations.

And from all appearances, Amarillo is glad to have a Board of City Development to attend to the work.

Other communities, especially those surrounded by undeveloped resources, will do well to consider the publicity tax idea. Through it, those who profit most pay the most—and even they don't pay much.

H. E. BOZEMAN, Publicity Manager.  
Amarillo Board of City Development.

### **Favors Taxation for Community Publicity But Not for Support of Commercial Organizations.**

Lexington Board of Commerce,

Lexington, Ky., February 9.

*Editor Manufacturers Record:*

We have read your article on the subject "Shall a Commercial Organization Be Supported by Public Taxation?"

We think there is a considerable difference between the support of commercial organizations and community advertising. Our attitude would be favorable toward an appropriation on the part of the city government for community advertising.

We do not believe however, that it is good for the city or good for the chamber of commerce for the latter to receive its support from the city government. If such were the case the chamber of commerce would immediately become a political institution.

In many instances the chamber of commerce has been able to interest business men in affairs affecting their business, which affairs are subject legally to the city government. The business men however, have not taken the trouble to interest themselves to any considerable extent in municipal government.

As a general proposition we do not believe chambers of commerce would in very great numbers welcome their support from municipal revenues.

This is said with the understanding of course that a few chambers of commerce are supported in that way.

PRICE GAINES, Secretary.

### **Uncertain as to Its Wisdom.**

Chamber of Commerce,

Birmingham, Ala., February 4.

*Editor Manufacturers Record:*

I have your favor relative to commercial organizations being supported by public taxation.

I do not know that I am fully sold on this proposition. I am taking the liberty of referring it to the board of directors for its consideration. From one viewpoint it seems to be the proper thing to do, but looking at it in a different light, I am afraid it might result in placing the Chamber of Commerce in politics. However, as soon as our board of directors has handled this I will write you further.

O. L. BUNN, Secretary-Manager.

### **Some Disadvantages That Should Be Studied.**

Austin Chamber of Commerce

Austin, Tex., February 2.

*Editor Manufacturers Record:*

We have in Texas several organizations in medium sized cities that have been supported by taxation for the past ten years. These cities are: Amarillo, Brownwood, Sweetwater, Brownsville and possibly one or two others. There are some disadvantages attached to this method that should be considered seriously before adopting it.

W. E. LONG, Secretary.

### **From the First Secretary of the First Tax Supported Commercial Organizations—Some Advantages and Some Disadvantages.**

West Texas Chamber of Commerce,

Stamford, Tex., February 4.

*Editor Manufacturers Record:*

We have your circular letter of January 20, and note you say that a somewhat revolutionary suggestion as to the maintenance of commercial organizations is made in the MANUFACTURERS RECORD of January 24, wherein it states that commercial organizations should be supported by taxation.

We desire to call your attention to the fact that there are now five commercial organizations in West Texas supported by taxation, or those at Amarillo, Plainview, Sweetwater, San Angelo and Cisco. Several of these have been supported by taxation for the last ten years. The writer himself was the first secretary of the Amarillo Board of City Development, which was the first entirely tax supported commercial organization in the United States.

However, we are far from sure that this plan is the proper solution of the financing of the chamber of commerce. It has many advantages but it has some pretty bad weaknesses also. As a matter of fact nearly all of the first chambers of commerce or commercial organizations were entirely tax supported, and many are so supported in continental Europe. They were taken out of the realm of tax support later on in order to give them freedom of action.

PORTER A. WHALEY,  
Manager.

### **The Plan at Least Right in Part.**

Charlotte Chamber of Commerce,

Charlotte, N. C., January 31.

*Editor Manufacturers Record:*

Your letter received enclosing copy "Organizations Supported by Public Taxation." I read this article carefully in the MANUFACTURERS RECORD and have thought a great deal along this line, but my mind is not fully made up as to whether this, as a whole, is the proper thing to do or not. Part of it, I am sure, is all right and should be carried out. There should be cooperation from the city and county administrations to its chambers of commerce and they should make liberal subscription toward the maintenance of these organizations.

Within the next two weeks I will write you my views if you care to have them. Do not misunderstand me that I do not approve your article, for I want you to send one hundred copies at once and I am going to send them out to one hundred of my leaders and then we will meet and talk the question over among ourselves and will let you know what they think about it.

C. O. KUESTER,  
Business Manager.

### **Commends Public Taxation for Publicity.**

Chamber of Commerce,

Chattanooga, January 26.

I think that the only proper way to get funds for advertising a community is through tax. The old style of permitting a few people who are contributors to the Chamber of Commerce to stand the entire burden of advertising a community is all wrong, as I find that some of the people who are the biggest benefactors from an advertising campaign are the ones who make no contribution whatever to the Chamber of Commerce. I hope that you will keep up this campaign and that it will bear fruit.

H. W. LONGLEY,  
Secretary-Manager.

## Florida's Rare Minerals Won the World War.

A STORY OF TITANIUM AND ZIRCONIUM DEVELOPMENTS IN FLORIDA SEA-SHORE SANDS WHICH GAVE VICTORY TO AMERICA AND THE ALLIES.

By GEO. M. CHAPIN, Jacksonville.

The discovery and development of the world's greatest deposits of two rare earth minerals containing titanium and zirconium, by two Florida men in Florida sands, form the details of a story of most fascinating interest.

The further fact that the discoverers gave to these sands from the great Peninsular State an incalculable value, and the personality of the discoverers, their struggles to convert an interesting experiment into a practical business enterprise against great odds, and the final recognition of their accomplishment by the commercial and scientific world, have placed the names of Henry H. Buckman and George A. Pritchard high on the list of pioneers in American industry.

The locale of the story is along the ocean beach of Florida, a few miles north of St. Augustine, not far from the spot where Ponce de Leon landed in search of the fabled Fountain of Youth, a spot now marked by the little settlement of Mineral City.

Mr. Buckman was born in Jacksonville of aristocratic Floridian parentage. In due time he went to Harvard and

ence in the gold mines of Central America, Colorado, and elsewhere. He worked out the formula for a paint particularly adapted to withstand out-of-door exposure, such as steel bridges, locomotive boiler fronts, and the like, which for years has defied the ravages of time.

The two men came together at Indianapolis, and soon were working out the details of an electric furnace. An essential of this form of furnace is highly refractory lining that will withstand the highest temperatures. In casting about for such a material, Mr. Buckman unearthed from his effects some samples of Florida sand. He had by accident saved them from the laboratory days at Harvard. He had experimented with these to ascertain their adaptability for the manufacture of glass. As the men scanned these contributions from Florida's soils, suddenly Pritchard exclaimed:

"Say, Buck, where did you get this sample?"

The label said, "From milepost 51."

"Where on earth is that?"

"Oh, down in Florida, somewhere. It must have been



PROSPECTING SAND DUNES ALONG THE OCEAN BEACH.

when he reached the elective stage of his course he specialized in chemistry and engineering. Completing his course at Harvard, he spent a year in German laboratories.

On his return from Europe, his knowledge of chemistry and electricity provided him a place with a large steel company near Buffalo, New York. Later he served as chief engineer to a western milling concern where he evolved an electrically moved device which accurately recorded the percentage of moisture in grain as it passed rapidly from the loaded car to the big bins inside the mill. He was also a developer of the automobile headlight.

Mr. Pritchard was a mining engineer, with wide experi-

along the line of the Florida East Coast Railway."

"Look here," continued the excited Pritchard, "see these little black specks in the sand. They look like ilmenite, one of the rare earth minerals, and I know a firm that wants it in hundred—or thousand ton lots—and they'll pay real money for it. Where did you say this came from?"

"Down in Florida. That is ilmenite, and if you know where there's a market for it, I think I know where there's a big supply of it. Let's go and see."

The pair boarded a train for Florida. Down the east coast of the Peninsular State they went, and they left the train near a wide place in the road known by the classic name of



Spuds, in the middle of the famous Hastings Irish potato section. They hunted up milepost 51; they waded ankle-deep through the sand; but never a glint of the ebon-hued particles of ilmenite!

"Say, Buck, didn't you get mixed on those figures? Wasn't it milepost 15, instead of 51?"



BACK OF SAND DUNES—LOOKING TOWARD THE OCEAN.

Back to milepost 15, not far from the town of Bayard, but here again only disappointment.

Pritchard was born of a stubborn race. He hadn't hunted gold in Central America for nothing. He wouldn't give up the quest until the last card was turned.

the desired milepost, and they jumped from the train. Pritchard grabbed a handful of sand from the side of the right of way, and staring into his face were the little "black specks" of mineral. The game was flushed!

Milepost 15, where Buckman and Pritchard found their first mineral, is within sight of the Atlantic Ocean. This proximity to the ocean was suggestive. Along the beach, they searched and found the mineral in greater quantities than near the right of way, but nowhere in a higher concentration than a few per cent, but it was there in the beach sand and in the dunes behind it, millions of tons of it.

Eventually, they examined the ocean front from near Charleston, S. C., to the Straits of Florida, more than eight hundred miles, including both banks of the Indian River, several of its largest tributaries, and much of the Gulf Coast.

Their conclusion was that the mineral was to be found in commercial quantities on the ocean beach only, between the St. Johns and the Matanzas rivers. Accordingly they located their base of operations four miles south of the little city of Pablo Beach, and they also obtained options for the purchase of seventeen miles of ocean front property southward towards St. Augustine.

No patent could protect their interests, and therefore secrecy was important. Quietly they erected an experimental plant behind the sand dunes. Many samples of the ore were sent to the chemists in the North and to others in France and England. One return brought the assurance that there was nothing of value in the samples submitted. Another chemist declared that the samples had been faked, for such an association of minerals never occurred in nature. Still another, after making numerous chemical analyses sent word requesting that no more samples be sent, because the presence of so many unusual substances defied satisfactory chemical analyses.

With the little test mill, Buckman and Pritchard separated the ores into classified groups so that analysis was possible, and a partial list of the minerals they discovered in these Florida sands includes ilmenite and rutile, which are the ores of the metal titanium; zircon, the base of which is zirconium; monazite, a complex ore carrying radium, thorium,



SHOWING STRUCTURE OF ORE DEPOSIT NEAR THE LIMIT OF HIGH TIDES.

"Isn't there some branch of this railroad," he asked, "that has another milepost 15?"

"Yes, there's the Mayport division. That must be almost thirty miles long."

So they went. The obliging conductor slowed down near

erbiun, praseodymium, neodymium, and that mysterious gas helium; mica, hornblende, garnet, sphene, tourmaline, feldspar, staurolite, cyanite, olivine, sillimanite, corundum, and platinum.

Only a few of these minerals were present in sufficient

quantity to be available for commercial use, but the exceptions were rutile, ilmenite, monazite, and zircon. This group of minerals, as an able geologist remarked, is "the wreck of a mountain range," which suggests that the old Piedmont range, fronting the Atlantic coast of the Southern states, torn down in ancient times and washed into the sea, has been drifted down the littoral and deposited as beach-sands between the mouths of the St. Johns and Matanzas rivers on the Florida coast.

The mysterious mill in a lonely spot on the beach excited curiosity, which was not lessened by the necessary secrecy

The world then knew of only one source of supply in commercial quantities, which was in South America, under control of German capital. The fame of the Buckman and Pritchard discoveries of titanium in Florida, however, had spread among the wise men of the world. The French High Commission to the United States appealed to our Government for aid, with the implied suggestion that the Florida supply should be made available under such circumstances. The French High Commission also got into touch with Buckman and Pritchard direct, with the same suggestion and request.

Mr. Buckman was invited to consultation with the authori-



OUTCROP OF ORE SIGNS WHEN DUNES WERE WASHED BY WAVES.

that guarded the precious mystery. When a spur track to the mill connecting with the Florida East Coast Railway, four miles away, was constructed, curiosity rose to fever heat. Entrance to the mill was denied to visitors who came from far and near. Workmen at the mill were offered substantial bribes to steal samples of the mysterious product. Carload shipments to northern purchasers were broken into, and specimens abstracted. A prominent mining firm in the North sent an emissary under an assumed name. He was not discovered and made his "get-away" with considerable information. A party of German spies came, were spotted and driven away, in ignorance of what they came to learn.

When the Germans began the use of gas bombs, the world knew that the war was to be no ordinary struggle. When the Allied Nations decided to meet the barbarism of the Central Powers with like weapons as rapidly as they could be worked out, and it is no secret that they planned the campaign of 1919 to include gas in various forms. The chemists of the Allied Nations soon discovered the nature and the chemical composition of gases that would produce the effects wrought by the German bombs, but some of the most deadly of these gases were lighter than air, and would rise instead of lying along the ground where they were wanted.

At this critical period of the world struggle, French scientists discovered that tetrachloride of titanium, a fuming liquid, served to produce a heavier-than-air smoke or gas-cloud. They planned to use this not only for barrage work, for spotting shell and aeroplane-tracer bullets, but also as a carrier or heavy medium for mixing with the lighter poison gases, which were then being developed, the compound gases being held to the ground by the heavier medium, where they would be effective. But where was the needed titanium?

ties of the Ordnance Department, but Uncle Sam regretfully decided that he must hold fast to his own resources, so the French High Commission was politely advised that their needs for this rutile could not be immediately supplied.

The American Army Ordnance Department was then preparing for the campaign of 1919, which involved extensive use of gas shells for offensive attack, and it undertook to satisfy itself concerning the Florida deposits of the titanium material. A technical investigating committee came to Mineral City, and examined the Buckman-Pritchard operations, making a gruelling inspection. The same committee also inspected another reported source of supply which proved to be inadequate, and the final report was to the effect that the Buckman-Pritchard deposits were the sole available source of supply, that this supply seemed to be ample for the purposes of the Government.

The Department anticipated the use of titanium literally by the thousands of tons in the proposed gas offensive of the Chemical Warfare Section, so that Buckman and Pritchard were called upon to supply these materials in hitherto unheard-of quantities. Although it meant quadrupling their production at an expense of hundreds of thousands of dollars, they and their financial backers accepted the call. From that hour until midnight of Armistice Day the Buckman-Pritchard operations were dedicated to the war-work of the United States Government.

On March 31, 1918, the German armies broke through the British lines in Belgium and began their big drive with half a million men and the greatest concentration of artillery that the world had ever known. On the same day, with all the assistance that the Federal Government could lend, Buckman and Pritchard began their race against time to supply the



American battle front in France with gas. Their plant had to be enlarged, novel and intricate machinery had to be designed, constructed, and transported from half a dozen cities more than a thousand miles distant, over railroads choked with traffic, and installed in the plant, while five miles of railroad had to be built to connect with the nearest trunk line.

Even with the advantages of "Class A" preferences, conferred by the Ordnance Department, the National Council of Defense, and the Federal Department of Labor, the obstacles proved almost insurmountable, yet when the eventful eleventh of November came, these two Florida men had completed the largest plant of its kind in the world and had begun deliveries on the contract they had pledged themselves to fulfill.

The decision of the United States and the Allied Nations, to push the 1919 campaign in this manner, fighting fire with fire, soon became known to the German officials, with the result of causing a decided decline in the German morale. It showed the Central Powers that their precious secret had been discovered and that another source of rare earth minerals had been made available at a time when they could no longer increase their own supplies from their deposits in Brazil.

When the world was shocked, in March, 1918, by reports that German gunners had reached Paris with missiles fired seventy miles away, it was certain that the Germans had another secret up their sleeves. It will be recalled that this long-range projectile consisted of an outer shell fired from the gun containing several included shells. In their flight through space they gained renewed impulses from successive explosions of these inner shells. The French scientists could

The search for zircon, the ore of zirconium, at once became of vast importance. Hardly had Buckman and Pritchard begun the execution of their contract for the production of titanium than the Navy Department, to which the Federal Government allotted the task of duplicating the new German zirconium steel, sent out a call for help. For the second time the two Floridians found themselves in the flattering position of being the only men in the country who could supply the demand. For the second time Mr. Buckman was summoned to the Nation's capital for consultation. The navy officials eagerly demanded whether his company could furnish zircon in sufficient quantities for the necessary preliminary experiments in making zirconium steel.

It could meet that demand.

How soon could it begin deliveries?

Immediately.

So back to Mineral City he went, and within twenty-four hours the first shipment of several hundred pounds had started on its way to Pittsburgh.

The importance of these developments did not end with the signing of the Armistice. Into so many of the common uses of the world do these products enter today, that one is led to wonder what limit there may be to their usefulness as our knowledge of new applications of these metals expands. Ilmenite is now shipped from the Floridian mines to the North, where, in great electric furnaces, it is converted into the alloy called ferro-carbon-titanium, which finds its way into many branches of steel-making. It has the peculiar property when mixed with molten steel of making the finished product more uniform and therefore less liable to breakage. For this reason, it has gained importance in the manufacture of steel rails and steel castings. This alloyed steel has



THE OCEAN BEACH NEAR WHERE RICHEST DEPOSITS OF ORE WERE FOUND.

not reach the gun to analyze it, but they could gather up the shell-fragments that landed in Paris. These were torn to pieces in the laboratory, and it was discovered that zirconium had made possible this miracle in modern gunnery. A short time later, Major Raoul Lufbery, one of the famous American aces, was shot to death. With his usual daring in pursuit of enemy fliers he found that his bullets became suddenly inefficient against their planes, flattening out like bird shot against the armour of a battleship, and his daring led to his death. Here was another presumptive evidence of the use of zirconium steel in the armoring of German planes. They had launched the second benumbing surprise of their great offensive—"The Flying Tank."

already been adopted by several great railroad systems. Such steel reduces the crystallization of the finished product.

With the discovery of the commercial production of white oxide of titanium, a pigment claimed to surpass white lead and zinc-white in desirable qualities was given to the world. It also enters into the manufacture of linoleum. The electrodes of flaming-arc lamps are vastly improved in illuminating power and durability by treatment with titanium. It enters into the manufacture of automobile tires, is used in the coloring of glass, in imitations of ivory for the handles of canes, umbrellas, and piano keys, and in the coloring of fabrics.

Zircon, the ore of zirconium, enters into a variety of uses





DEPOSITS OF ORE AT DIFFERENT LEVELS ABOVE HIGH TIDES

quite as important as those of titanium. It has an exceptionally high melting point, above 4000 degrees Fahrenheit, and it is not attacked by the strongest acids.

The perfection of zirconium steel has not yet been reached, but the highest quality of zirconium tool alloy is in daily use in this and other countries. In the manufacture of white sanitary ware, bathtubs, toilets, cooking utensils, hospital ware, washstands, in fact, in every known form of white enamel ware, zirconium is now being used as the material that gives the white color and glaze which resists the action of acids, of disease germs, and the corrosion of decaying matter. In making electric porcelains zircon is one of the best materials. In aeroplane and automobile spark plugs,

wireless telegraph insulators, high-tension transmission insulators, and for similar uses, it is of the greatest value. It plays an important part wherever either high temperature or high voltages, or both, have to be withstood.

These qualities also make it desirable as a refractory, in fire-brick furnace-linings, retorts, crucibles, and ladles.

When, in 1565, more than three hundred and fifty years ago, Menendez returned to Florida, he brought orders from his Spanish King to survey these beaches for silver, gold, and precious stones. He obeyed, and he reported to his royal master that he found nothing of value. Yet the sand that was then rejected as worthless contained minerals destined ultimately to prove of greater value than those he sought.

### Completing Power Plant Improvements at Oklahoma City.

Oklahoma City, Okla., February 8 [Special].—Extensive improvements are nearing completion at the Byng plant here of the Oklahoma Gas & Electric Company. Two Stirling boilers of 725 horsepower each, designed for a steam pressure of 180 pounds, were furnished by the Babcock & Wilcox Co., of Chicago, Ill. The boiler feed water controllers for these boilers are Stets, Type B, supplied by R. D. Bliss & Co., Chicago. Mettler gas burners, supplied by the Leo B. Mettler Co., Los Angeles, Calif., are used. Pipe fittings and valves were furnished by Crane Co., Chicago. Nonpareil pipe covering was supplied by Smith-Totman Co., Chicago. In the construction of the furnaces "Hy" brand flint brick, furnished by the Hydraulic Brick Co., of Chicago was used.

In addition to the installation of new power equipment within the plant, a new outdoor type substation is being erected for connecting the Byng plant to the main transmission system. It is designed for one outgoing 63,000 volt, 3 phase line, two 33,000 volt 3 phase lines, and one 2300 volt 3 phase line. The transformer installation consists of a bank of three 2000k. v. a. 2300/63,000 volt Westinghouse trans-

formers and a bank of three 1000 k. v. a. 2300/33,000 volt Westinghouse transformers. Each bank of transformers is connected to the powerhouse through a 2300 volt outdoor automatic type General Electric oil switch. For the 2300 volt connection between the substation and the plant, lead covered cable furnished by the Safety Insulated Wire and Cable Co., Chicago, is used.

Each of the two outgoing 33,000 volt lines is connected to the transformer bank through a General Electric 33,000 volt automatic remote controlled oil switch. The 63,000 volt line and the 33,000 volt lines are protected by oxide film lightning arresters.

The steel work for the substation was designed and furnished by the Delta Star Electric Co., Chicago. The disconnect switches, choke coils, and fuse mountings were supplied by the same company. The substation will be inclosed with a Cyclone fence furnished by the Page Steel & Wire Co., of Chicago.

The Young Men's Christian Association of St. Petersburg, Fla., Gilbert Bush, secretary, is considering the erection of a \$250,000 building in 1924.

# Why Do the Germans Go Begging Abroad for Their Suffering People?\*

The appeal for help sent to the United States on behalf of "starving" German people had no favorable echo in France, not because French people do not deplore like everybody else the unfortunate position of a certain class of the German population, or because they are less human than any one else, but because they know for certain that the food situation in Germany does not really call for foreign help, and that it should be dealt with by the rich people of Germany, particularly by the industrialists who made during the war and since the war so much money which they were careful enough to send abroad.

Certain American bankers made known their opinion last month concerning German holdings in foreign countries, and they said that German deposits in the United States only, amount probably to \$200,000,000. "A nest-egg of this size," they are reported as having said, "could be used as a basis for from \$1,000,000,000 to \$2,000,000,000 worth of business, a figure which even in these days of many ciphers, is tremendous."

In France, one has good reason to believe that the German actual holdings in the United States are very far above the \$200,000,000 level and that they are probably 8 or 10 times greater but, taking for the sake of argument, this extremely low figure as being correct, it is hard for the French people to understand why it should appear so urgent to open a \$70,000,000 credit in the United States to help "starving" Germans, while there is enough German money in America for a volume of trade between 1 and 2 billion dollars. It seems very strange indeed that the German Government should go begging abroad, instead of making an appeal for charity to its own wealthy people at home.

As the French people know that there is enough grain and fat in Germany to go round, they wonder again why those foodstuffs are precisely the ones demanded by the Germans.

Cablegrams from Berlin published in hundreds of American newspapers have shown us how Germany, while crying for help abroad, spent the most extravagant New Year since the pre-war days. The Berlin correspondent of the New York Times sent to his paper a cable saying:

"A canvass of the principal hotels indicates the peak of New Year business with practically 100 per cent German patronage, for this New Year Berlin and Germany generally are denuded of foreigners.

"The Hotel Adlon is sold out with 550 dinner places at \$10 each, plus a 10 per cent obligatory tip, which merely covers the table d'hôte food, and no drinks. Champagne is the favorite beverage, selling for around \$5 for German and \$6 to \$8 for French champagne, many Germans frankly preferring the latter despite the Ruhr and Rhineland occupation. Hugo Stinnes, is already assured of 800 cash customers at his Esplanade Hotel, who pay a charge of 45 gold marks plus 10 per cent. The Bristol has between 600 and 700; the Kaiserhof, the Central and the Excelsior are all booming. The Rheingold alone tonight holds 2000 Germans who are not going thirsty.

"Berlin's 'Great White Way,' the Kurfurstendamm, is lined for miles with resorts with elaborate facilities for spending. Everyone, from the lobster palace and the 'champagne only' emporium to the beer-halls holding several thousands, is jammed and overflowing."

The Germans themselves were disgusted and public indignation rose high. German newspapers admit now that what took place on New Year's eve was enough to prove that the Government could have spared the country the humiliation

of begging in America, if proper measures had been taken to draw on German resources.

According to a special cable from Berlin to the New York Evening World:

"The Berlin Volkszeitung prints today a letter from Switzerland complaining that while Swiss citizens and public bodies are pinching themselves to send food and money to Germany, 70 per cent of the Swiss hotels' guests are German, many of whom apparently do nothing to help their compatriots.

"George Bernhard, writing in the Vossische Zeitung denounced the reported extravagances of wealthy Germans at Swiss, Italian and other European winter resorts while thousands in Germany were supposed to be dependent upon the charity of Americans and other foreigners to avert starvation. He said:

"There are two things that cause intense indignation both in Germany and outside:

"Firstly, that most of these people have never paid any or only very inadequate taxes, that they have enriched themselves by the mark inflation and by the same mark inflation escaped almost entirely from taxation and that all of the successive German Governments have failed completely to bring these shirkers to account.

"Secondly, that these people lack even the most rudimentary forms of decency, a social decency that in other countries induces wealthy persons to part with some of their wealth for the benefit of the starving poor, of science and of art.

"Names that all over the world are regarded as symbols for German wealth will be sought in vain on subscriptions for charitable purposes.

"These people have millions to finance organizations which avowedly seek to destroy the Constitution and the Government and to subsidize newspapers that openly urge civil war, but where are their public kitchens, where are their Christmas gifts to the poor, where are their donations to scientific institutions?

"Neither Englishmen, nor Americans, can understand this attitude of Germany's rich men. Even Austria's newly rich behaved differently. The names of the biggest among them have always headed the lists of collections for Austria's poor.

"He who lives in affluence while his next door neighbors are starving must expect to be despised by everybody."

No wonder the German request for help is being considered both in France and in Belgium as a propaganda manoeuvre rather than as a genuine operation of a really needed economic character, and it is only natural that the Governments of France and Belgium should have finally refused to allow priority over their reparations claims, to a loan of \$70,000,000 to be put for such a purpose on the American market.

There is no doubt that unfortunately, a certain class of the German people of the cities and towns suffer in misery, but there is no doubt also that their sufferings could easily be assuaged if the Government of the Reich was as willing to organize charity at home as it is to go begging abroad.

## Will Build \$200,000 Warehouse.

Contract has been awarded to William F. Chew & Co., Baltimore, for the erection of a \$200,000 warehouse in the city for the Central Metal & Supply Co. The building will be four stories, 90 by 108 feet, of reinforced concrete construction. It will be equipped with cranes and provided with switching facilities. In the rear of the structure a pipe shed, 56 by 100 feet, will be erected. Huldreich Egli of Baltimore is the engineer.

\* Extracts from Bulletin of the French Bureau of Information in the United States.



# Dairying Is the South's Rising Star of Prosperity.

GREAT DEVELOPMENT OF THIS INDUSTRY IN 1923, WITH BRILLIANT PROMISE FOR THE FUTURE.

WHERE THE DAIRY COW ENTERS, POVERTY DEPARTS.

By CRADDOCK GOINS, Milwaukee.

A rising star of prosperity crossed the horizon of Southern farm-conditions last year. It was in the form of the dairy industry. A review of Southern agriculture in 1923 shows the progress of dairying as an outstanding development.

Agriculture in the South is coming into its own. In adopting dairying the South is claiming for itself an industry to which it is naturally entitled by all rights of conditions and necessities.

The dairy cow needs the South and the South needs the dairy cow.

That is a point settled to the satisfaction of all thoughtful observers. The only point unsettled is, will farmers, bankers, merchants and all business leaders interested in the development of their section readily recognize their highly advantageous opportunities for advancing their section economically, educationally and socially through dairying, or shall they let the matter drag and wait for dairying to force itself upon the South?

For dairying in the South will not be denied. Dairy leaders of other sections are among those more readily grasping the South's favorable conditions for the industry. It is important that preparations be made for it now, that it may have a firm, solid, business-like foundation.

The South today is riding on high tidal waves of fortune's favor. Farm diversification is found in the highest form of development ever fashioned in Dixie. A good price for cotton has opened the floodgates of wealth. It is over that same good price for cotton that the South must be particularly thoughtful for fear that the very prosperity it brings may stand in the way of future prosperity more bountiful, more widespread and more lasting than cotton alone ever has made possible or ever could promise.

A note of warning is in order. Southern farmers are happy over the cotton situation so far as price is concerned. The temptation now is strong to put more faith in cotton and give lighter consideration to dairying and diversification, the two forces that go hand in hand toward making cotton itself a more profitable crop and farming a happier and more remunerative business.

The South has learned, from disappointments too bitter for tears, that farming is a business, requiring the sanest business judgment at all times. It is certainly not good business to devote too much effort to cotton when the South can grow nearly every kind of crop that can be grown anywhere on this continent. This is particularly true of that spot in the so-called heart of the South—Tennessee, Georgia, the Carolinas, western Virginia, southern West Virginia,

southern Kentucky, northern Alabama and northern Arkansas, around which a successful dairying movement is taking shape, though without question other states can do wonderfully well in this same direction.

At this time, with conditions far more favorable to Southern agriculture than since 1861, it behooves every Southern farmer and business man to make place for a new order of Southern agriculture, to be filed under the double d's—dairying and diversification.

Dairying is bringing the dawn of a new day. It is leading the way toward making farming more profitable in the South than in any other section of the country. The time before the Civil War, when Southern acres were more prosperous than any others in

the nation, is sure to return; and in returning to bring more of the bounties than men of conservative imagination can possibly understand without having closely peered into the facts.

Dairying promises to bring to fullest completion the bright, brave dream of that great Southern patriot Henry Grady, who had the vision to see a New South rise phoenix-like from the ashes of crushed hopes, and pulsate with the vigor that begets new victories.

Dairying can add a hundred million dollars to the South's annual wealth, in the near future.

In the December 6 issue of the MANUFACTURERS RECORD, the writer, who has spent some time work-

ing with abler and wiser men in the world's greatest dairy state, declared that the South is the coming dairy section. This assertion was made after a careful investigation of dairy conditions in the Middle West and with calm reflection upon conditions in the South.

The December 6 article was very conservative. This is indicated by expressions from readers who have studied dairying and its future in the South. The writer was deliberately conservative at that time, principally out of courtesy to this magazine that has done so much for the South's upbuilding through a conservatively constructive policy, and next because I wanted to express myself simply on dairying as a solid business proposition for the South.

The writer still is conservative when he says that the South is better prepared to build up dairying than any other section. He is conservative when he says the South can manufacture more and better dairy products, and make the industry more gainful, than any other section.

If I were to put aside the restraints of a discreet heart and speak from the basis of what actually is strongly indicated, I would say that the South is destined to be the dairy center of the country, and the nation's leading sec-

## DAIRYING AND THE SOUTH.

"Where the dairy cow enters, poverty departs."

"The South is naturally favored for the upbuilding of a great farm prosperity through dairying."

"All-year pasturage, proper quality of soil for ideal dairy-cow feed, plenty of sunshine and fresh air for exercise of animals, cheap labor, inexpensive housing—these are some of the naturally favorable conditions for dairying in the South. It costs less to feed the cow in the South."

"Opportunities are bigger and better in the South. The temperate climate favors the dairy cow. The South is the only part of the country where land can be bought cheap."

"People in Minnesota, Wisconsin and Iowa are amazed at hearing of the marvelous, matchless agricultural resources of the South. They thought we raised nothing but cotton."

"The South today is riding on high tidal waves of fortune's favor."



tion in all forms of development. That is the way the cards read.

I live in Milwaukee, earn my living in this city, and probably never again shall be fortunate enough to live in Dixie. But I know conditions in the South and in the dairy states. There is a full measure of satisfaction in unselfishly telling facts when they are recognized, "for there is no pleasure comparable to standing on the vantage ground of truth."

This writer's observations lead to this conviction: The situation has resolved itself into the question of how soon the South will seize upon its glowing opportunities and develop dairy prosperity. Men of other sections are entering the Southern states every year to take up dairying. They are reaping, in their new field, dairy dollars that anyone else could just as well be earning.

While this is being written, in the city dubbed the "dairy capital of America," the thermometer is around 20 degrees below zero. The evening papers tell of blizzards throughout Wisconsin, Minnesota, Iowa, Montana and the Dakotas. In all this terrible weather men are struggling back and forth, between dairy barns and firesides, trying to take care of dairy cows, properly feeding and milking them. They think they are properly caring for them, but they can never care for dairy animals in the Middle West and North as they can be cared for in the South's mild temperatures.

Every winter there is a big dairy loss, in one way or another. While there is seldom any freezing to death of cows, the almost continuous housing for nine months of the year often brings about cattle tuberculosis. Many dairy farmers actually lose their lives going from the farm house to the barn, for a blizzard is worse than any form of darkness so far as shutting off vision is concerned.

And these men are making money from dairying—good money, regular money, cash money, the kind that is collected with the sale and spent over anybody's counter at any time. They are independent. They never worry over a crop loss, except to regret that it prevented their profits from being as great as otherwise would have been the case.

It is deliberately to blind yourself not to recognize the golden harvest the Southern farmer can reap from the dairy animals. You often have read of the "milk from contented cows." Common sense dictates that nowhere can conditions be so ideal for the contentment of the cow as in the section where all seasons are moderate, all-year pasturage is available, no great expenditure is involved in housing the cows, there is afforded plenty of sunshine, fresh air and exercise to prevent tuberculosis, cheap labor is obtainable, and the cows have the care of men of the finest strain in this country, for many years noted for proper treatment of stock.

When a man familiar with the South sees the wonderful prosperity that has been gained through dairying by some of the dull, stolid, unintelligent, unimaginative foreigners of the Middle West, he would laugh heartily at the suggestion that Southern farmers are not progressive enough for dairying. To use a word of the street, there has been some choice "bunk" expressed concerning the Southern farmer. In the first place the average Northerner, unintentionally, becomes a first-class "four-flusher" when he speaks of things concerning the South. That is due not to malicious intent but to thoughtless parroting of things often heard from men who know as little of the South as all of us do about Kingdom Come.

I have readily recognized the wonderful things that the people of the Middle West have done agriculturally. At the same time I am fully convinced that what has been done in the Middle West is nothing more than the South can do over and over again.

An agricultural trend in that direction is shaping up now. Dairying has taken a firm foothold in the Southwest.

Texas leads the Southwestern states in dairying. Close behind are Oklahoma, Arkansas, Louisiana and Mississippi.

Last year was featured by considerable dairying activity in Tennessee, Kentucky, Virginia, Alabama, Georgia, the Carolinas and West Virginia. Tennessee and Kentucky have been dabbling at dairying with more or less zeal for several years. Developments last year proved that there are natural conditions greatly in favor of these two states and others in the South. Farmers who have seen there is money in dairying are those who have discovered they can handle the cow without great expenditure of time and effort, but that they must handle the animals in the right manner, and follow dairying with some semblance of system.

They have found that the cream checks are a veritable boon, coming in regularly all the year round and affording means of tiding over every emergency.

Dairy farming in the so-called heart of the South is beginning to reveal its possibilities when properly handled and carefully studied. There they have marketing troubles that must be worked out; that's one of the chief faults. Another is, the business men and bankers who have interested themselves in dairying have not weighed the matter as a careful business proposition, taking too much for granted, and being too quick to give up when disappointments arose.

Wisconsin had these same disappointments in the early days.

There is every reason why Tennessee and its adjacent states should be one of the greatest dairy sections of the country. Soil is right for grass for long seasons; there can be pasturage almost for the entire year, with only about three months of the year when cattle must be fed by the farmers. Additional silos would make the situation tremendously more favorable. A few Tennessee, Georgia and Alabama farmers have sensed the value of silos. Others must. The silo is the very pillar of dairying. The South is admirably equipped for silage.

The soil in the South gives to feedstuff just that quality of sweetness that creates the ideal flavor for dairy products—a quality missing in the dairy states of the Middle West, even in Wisconsin soil, though the Badger state has worked sensibly in preparing the kind of feedstuff necessary to building up the best stock in the world.

In 1918 Alabama and Tennessee had twenty creameries. Last year there were 75 creameries in the two states. In 1922 Georgia did not have a single cheese factory. A half dozen or so were erected in 1923. About eight or nine creameries were established, giving the state a total of seventeen. Counting the ice cream factories this gives Georgia some 45 dairy plants.

The northern portion of Georgia especially finds dairying a blessing. Farmers who formerly eked out a bare existence from growing cotton in the "red old hills of Georgia" now understand that they can make money from cream checks. They have plenty of pasture land. It is a splendid place for cheese factories to thrive. Georgia is making a quality cheese that gets a premium on the market.

In fact, the spot formed by Tennessee and surrounding states seems to be a section with a dairy destiny. North Carolina, long in the march of progress, is solving a big problem for its farmers by providing cheese factories. In the near future there will be many more such factories, creameries, milk plants, milk depots, cream stations and ice cream plants. Dairy products galore can be produced in that section, especially cheese. North Carolina is making as good Swiss cheese in her mountain counties as any that could be obtained from Switzerland.

The market is unlimited. Money is ready for all the cream farmers can supply. Georgia is far, far short of manufacturing enough butter to supply its one large city. All the dairy farmers of Tennessee, North Carolina and

Mississippi can supply the cities of Chattanooga, Nashville and Memphis with the dairy products these cities require, at the proper prices and in the proper manner.

As stated, dairying must be regarded as a business proposition. It cannot be gone into lightly, indifferently, but must have the same, solid working principles as those fundamental to any other business enterprise.

What disappointments have been encountered in dairying in the South—and every new dairy section has them in some measure—are due to lack of a proper system of distribution and to the disposition of some to regard it as a fad. Dairying must be studied. Experts must be consulted in dairying manufacturing problems, and organizations of control are necessary for the general welfare of the industry.

California, which has gained its usual jump on the new states in taking up dairying, has three or four organizations handling different phases of the broad business principles of dairying. Californians, Inc., is an organization that has for one of its principal purposes the promotion of the business side of dairying, the financial part. The marketing side is handled by the California Dairy Council. The practical work in the exploitation of the industry is carried out by the Pacific Slope Dairy Association, which takes in California and the Southwestern states and the upper coast section.

The Southern states should have dairy commissioners. They should have aggressive dairy organizations to work to bring dairymen from the advanced dairy states to the South.

Here is another wonderful example of what homeseekers' rates can do. Men in the Middle West are interested in the South. The way should be made open for them. That should be done now.

In a previous article I stated that the dairy industry was presented to the Middle West by good-natured young gentlemen from Denmark, Sweden, Switzerland and Germany, where dairying for centuries has been a desperate resort against the wolf of starvation.

At a recent convention in the South it was only with the exercise of good manners that I was able to contain myself when a speaker, a native Southerner, said:

"Our Southern farmer is not ambitious enough; he won't do for dairying."

That shows that some business men are not staying in as close touch with Southern farms and farmers as they should—as is absolutely imperative if the South is to push forward a considerable program of agricultural development.

But it was most gratifying when a dairy manufacturer challenged that thoughtless and untrue statement, saying:

"I happen to have evidence that the Southern farmer is ready to do full justice to dairying. Five years ago I spent \$10,000 for dairy cows. I sold them to nearby farmers, on time. I have collected the last dime due on them. I am getting from these farmers cream which I manufacture into dairy products. For their cream I am regularly paying them money with which they are improving their farms, sending their children to school, and making their conditions in life happier."

"When the dairy cow enters, poverty departs."

It has been said that cotton is a "hundred days' crop." That is untrue. It is a very costly crop in time, money and effort, especially under weevil conditions. The farmer relying too greatly upon cotton is actually working with cotton 365 days and nights in the year, never at peace in mind as to favorable growing conditions or favorable markets. The end of one battle with a cotton crop means weary weeks of knocking down the stalks and converting them into tombstones or funeral pyres for the boll weevil, and then weary months of planning and preparing for another battle

in the spring, with the grim spectres of crop failure and uncertain market keeping grim vigil at the end of the row.

Let the South grow cotton by all means, but grow it according to its place in the proper agricultural scheme. With dairying it is possible to cut cotton acreage, cut down high fertilizer costs, and with cheaper and more efficient fertilizer grow cotton more profitably than it ever has been grown. That will leave room for other crops.

Then, in addition to profitable cotton, the farmer will have profits from his cream checks as well as food for his family.

Dairying is bringing a new faith and a new hope to Southern farmers.

When our Master was on earth He told His followers that faith as a grain of mustard seed would move mountains. He meant all kinds of mountains—mountainous obstacles, for instance.

Faith such as the people of Tennessee, Georgia, Alabama, Virginia, Kentucky, Arkansas, Mississippi, Louisiana and the Carolinas are showing in dairying is sure to lead the South to new triumphs in agriculture and industry.

Dairying is going ahead in the South "as a voice crying in the wilderness," heralding a new prosperity. It is a voice that every man who loves Dixie should hear and heed with all his heart, and faith!

### Over 94 Per Cent Increase in Wealth of South Carolina.

The value of the principal forms of wealth in South Carolina December 31, 1922, was \$2,404,845,000, as reported in a preliminary estimate by the Department of Commerce. Compared with the wealth of the state reported in 1912 of \$1,235,541,000, this is an increase in ten years of 94.6 per cent. Per capita values increased from \$795 to \$1385, or 74.2 per cent.

All classes of property increased in value from 1912 to 1922. The estimated value of taxed real property and improvements increased from \$456,614,000 to \$1,073,758,000, or 135.2 per cent; exempt real property from \$49,993,000 to \$116,186,000, or 132.4 per cent; live stock from \$61,304,000 to \$61,927,000, or 1.0 per cent; farm implements and machinery from \$15,605,000 to \$32,945,000, or 111.1 per cent; manufacturing machinery, tools, and implements from \$98,943,000 to \$132,579,000, or 34.0 per cent; and railroads and their equipment from \$130,580,000 to \$160,166,000, or 22.7 per cent. Privately owned transportation and transmission enterprises, other than railroads, increased in value from \$55,766,000 to \$83,227,000, or 49.2 per cent; and stocks of goods, vehicles other than motor, furniture, and clothing from \$366,736,000 to \$708,959,000, or 93.3 per cent. The value of motor vehicles was estimated at \$35,093,000 in 1922.

It should be borne in mind that the increases in money value are to an extent due to the rise in prices which has taken place in recent years, and so far as that is the case they do not represent corresponding increases in the quantity of wealth.

### Water Company to Build Plants in Alabama Towns.

Birmingham, Ala., February 18—[Special.]—The Alabama Water Co., John B. Weakley and Eugene Fies, executives, has completed plans for the construction of water works in several towns of Alabama, including Leeds and Irondale, in Jefferson county, near Birmingham, and Hartselle, in Morgan county. The plants will cost from \$50,000 to \$100,000 each and will supply water for domestic and industrial purposes. A big cement plant is located at Leeds besides a bag factory and concrete products plant. Irondale is six miles from Birmingham and has prospects of locating some smaller industries when water is available.



### A Combination Chamber of Commerce and Office Building, Through Group Insurance, Without Cost.

Securing an office building and site valued at \$350,000 without asking any one to invest a dollar, without obligating one of its members, and without borrowing a dollar is a problem successfully solved by the Greenville, South Carolina, Chamber of Commerce. And work will shortly be under way on a 10-story building, to house the Chamber of Commerce and various other civic organizations with offices to be rented to the public.

How Greenville is apparently getting a big office building without cost in one sense is worth telling as it opens up larger



NEW BUILDING FOR GREENVILLE CHAMBER OF COMMERCE possibilities. From a letter to the New York Commercial some interesting details are gathered.

Four years ago the chamber received permission to use the old Court House or Record Building until permanent quarters could be obtained. A few months later the Legislature passed an act giving the organization a 100-year lease on the property. During the next three years the membership increased to 1500, and the building committee headed by John S. Russell, ex-president of the chamber, announced in the spring of 1923 a plan of financing which insures the erection of a building to meet the needs of the city.

By the terms of the plan the Southeastern Life Insurance Company agreed to issue a group insurance policy, in endowment form, to mature in 30 years, on the lives of the members of the chamber of commerce. All the members had to do was give their ages; they didn't have to pay any premiums, these being assumed by the chamber. When the policy was issued, the insurance company agreed to purchase bonds to the extent of \$250,000, this sum to be used for erection of the building. The revenues from rents, after paying the operating expenses of the building, will be used to pay

the premiums on the insurance policy. The insurance company is made the beneficiary and whenever a member of the chamber of commerce dies the outstanding bonds are reduced by the amount of insurance carried on each member's life. Within 30 years the entire policy matures and the Southeastern gets its \$250,000 back, the chamber of commerce gets its bonds back and still has 70 years in which to use the building free. At the end of 100 years the land and building reverts to Greenville county.

To test the validity of the act of the legislature in granting the 100-year lease to the Chamber of Commerce the whole plan was given a final test, being carried to the Supreme Court of South Carolina in a friendly suit, with the result that the lease was declared legal in all its phases. The state insurance department has approved the insurance company's plan, and bankers of Greenville and elsewhere have stamped the plan a model of financial engineering.

### Architects for Baltimore Municipal Buildings— \$1,000,000 Police Building and \$250,000 Heating Plant Included.

The appointment of architects for two municipal buildings in Baltimore has been announced by the Architectural Commission following an executive session in the offices of Mayor Howard W. Jackson at the city hall. These structures include a \$1,000,000 police building, for which Josias Pennington was selected as architect, and a \$250,000 heating plant, William F. Stone, Jr., architect, both of Baltimore.

The former building will be located at Lexington street and the Fallsway, east of the war memorial building, and will house all branches of the police department in addition to other municipal offices. Negotiations are in progress for a site for the heating plant, which is intended to supply heat for the city hall, courthouse, war memorial building, park and fire boards building and other city structures.

### To Build 500,000 Bushel Elevator at Fort Worth— Contract Let for Concrete Structure.

The Kimball Milling Co., of Sherman, Tex., wires the MANUFACTURERS RECORD that it has awarded contract to the Jones, Hettlesater Construction Co., of Kansas City, Mo., to erect a 500,000-bushel terminal concrete elevator at Fort Worth. This is a turn key job and work has already begun.

Reports from Fort Worth state that the structure will occupy about two blocks between the yards of the Missouri-Kansas-Texas Railroad and the right-of-way of the Houston and Texas Central Railway.

### Walnut Cove's Proposed Dam and Power House.

In connection with the proposed dam and power house to be constructed for the light and power plant of Walnut Cove, N. C., H. R. McPherson, city clerk, advises the MANUFACTURERS RECORD that contract has been signed and the contractor is now making necessary excavation preparatory to pouring concrete. M. E. Jones and J. E. Hayes, both of Walnut Cove are the contractors. Contracts for machinery and power lines have not been awarded.

### Production of Smokeless Coals in West Virginia.

Beckley, W. Va.—A pamphlet issued by the Winding Gulf Operators Association, with headquarters here, shows that the production of the smokeless coal fields of West Virginia during 1923 amounted to 35,778,101 tons. This tonnage approaches the peak tonnage of 1916 which amounted to 36,000,000 tons. As compared with figures for 1922, the tonnage for 1923 shows an increase of 2,009,335 tons.



# Southern Farmers Turning to a Protective Tariff.

IT WILL BE THE FAULT OF SOUTHERN DEMOCRATIC POLITICIANS IF THEY FAIL TO HEED THE SIGNS OF THE TIMES IN ECONOMICS.

By G. T. McELDERRY, President, Alabama Farmers Union, and now Chairman of Organization Committee of Southern Protective Tariff Association.

I feel highly honored by your request to write for publication an eight hundred word letter relative to the organization of tariff clubs in the South, in order to protect the peanut and cotton growers from loss, by the agitation of a reduction of the duty placed on vegetable oils. The farmers of Alabama lost more money on cotton seed by the agitation of the low tariff theorist than the state appropriated for the education of 500,000 white school children in the 1923 session of the Legislature.

Our purpose is to show the farmers how they are affected by coming in competition with the cheap coolie Chinese labor, accustomed to an exceedingly low standard of living. We are at the same time showing the farmers those who are benefitted, by this low tariff on vegetable oils. We are showing them that at \$1 per pound there is not \$5 worth of wool in a \$50 suit of clothes, and if a 10 cent duty is fixed on wool per pound it would not add one per cent to the cost of a \$50 suit, but would surely add to the value of the cotton produced by the Southern farmer; as wool is the only competitor cotton has worth considering.

We have in Alabama 20,000,000 acres of land excellently adapted to the growth of sheep, with probably less than a million sheep in the state; because the Underwood tariff permitted wool to come into the country free from all parts of the earth.

I now have five men employed with Ford cars, canvassing the state beat by beat, organizing Farmers Union locals and tariff clubs as a safeguard against meddling by the tariff theorists. With the farmers informed as to how they are affected by the low tariff, there is not a congressman from the state who would dare again to advocate free oil and free wool, nor even a reduction in the present duty imposed by the Fordney-McCumber bill to protect the grower of vegetable oils. The effect of the Fordney emergency tariff, was to raise the price of peanuts from \$30 to \$135 per ton, and the price of cotton seed from \$20 per ton to \$60, but as previously stated the agitation for a reduction of the duty on vegetable oils not only cost the farmers of Alabama \$3,000,000, but almost bankrupted the oil mills in the state.

Not one that I know anything about has made money on this season's crush.

In 1920 under the Underwood low tariff I saw men begging the buyers of peanuts to take the peanuts at \$30 per ton, because it was the only commodity which they had to sell in order to get money to pay taxes, and buy shoes, clothing and school books for their children. I saw thinly clad, barefoot children shivering around the fire, because their fathers could not sell their peanuts and ribbon cane syrup at any price. I heard one man say he bought 20,000 gallons of ribbon cane syrup at 25 cents per gallon and could have bought 100,000 gallons at the same price, all on account of our beneficent low tariff which spells bankruptcy for peanut growers and oil mills.

I have secured the cooperation of the officials of the Farmers Union in six Southern states and am now corresponding with others, and as rapidly as we can secure the services of the right men, who know how to present the facts to the farmers, it is our purpose to get subscribers to the following:

**"We favor a tariff policy that will guarantee the farmer a standard of living and wage commensurate with the dignity and importance of his industry; and a reasonable profit above the cost of production."**

**"We pledge our influence and vote to candidates for Congress and the Senate who oppose any reduction in the tariff duty on vegetable oils, animal fats, and other products of the farm and ranches of the South and nation."**

Any man who refuses to sign the above, certainly is not willing to give the farmer a "square deal," and certainly is not entitled to the farmer's vote.

**The Tariff is an economic question and not a partisan question.**

We deal with facts, not theories.

A theory under certain conditions may be all right, but under other conditions is all wrong.

When Germany, England and Denmark bought the fats from the Orient it was not material that there be a high protective duty on vegetable oils, but when those countries could not buy because of the dislocation of all business by the European war, it was a crime for American ships to be used by our government to bring peanuts, peanut oil and soy bean oil by the hundreds of millions of pounds into this country for the benefit of the soap makers, packers and refiners, and bankrupt the Southern farmers who grew peanuts and cotton seed.

A whole volume could be written about the manipulation of the transportation service under Government control in the interest of certain big interests, but it is our purpose to advise the farmers, and it would not surprise the writer if upwards of several near-statesmen, who now draw down \$7500 per annum and perquisites—which is all they do, except occasionally get a clerk to write a speech for them, and have it printed in the Congressional Record—will be granted an indefinite leave of absence by the people in order to enable them to study economics.

## Planning for \$1,000,000 Hotel at Stone Mountain— To Be Feature of Proposed \$5,000,000 Resort.

Stone Mountain, Ga.—Plans are progressing for the \$1,000,000 hotel which is to be erected here in connection with the development of a \$5,000,000 resort by interests associated with Alonzo Atkins, of Birmingham, and O. F. Whittle, of Nashville, Tenn., who were reported a few months ago as having purchased 4000 acres of land in this section.

The building will be fireproof, six stories high, and will contain 250 guest rooms. It is to be erected by the Sherwood Forest Estate, Inc., with offices in the Healey Building, Atlanta. G. Lloyd Preacher & Co., also of Atlanta, are the architects. Landscaping and planting are under the direction of E. S. Draper of Charlotte and New York, while Donald Roos of New York will supervise the construction of an 18-hole golf course.

## Big Steel Shipment from Pittsburgh South by Water.

Wheeling, W. Va., February 16—[Special.]—Probably the largest shipment of manufactured steel ever made from Pittsburgh by water, went forward recently when the steamer William G. Clyde cleared with a tow of twelve steel barges containing 10,000 tons of steel for New Orleans and intermediate points. The steamer A. O. Ackard assisted the Clyde in making the tow as far as Wheeling. Stops were expected to be made at Louisville, Evansville, Memphis, Vicksburg and New Orleans.

[From the American Mining Congress Journal.]

### "Our Muscle Shoals Platform."

Remembering the investment of more than \$100,000,000 of the Government's money in Muscle Shoals; remembering that this expenditure was made out of the money subscribed by the entire citizenry of the United States in the form of Liberty bonds and must be met by the taxpayers of the United States; and remembering that the prime purpose of the entire project was for national security and defense, the American Mining Congress stands squarely on a very definite platform for the future disposition of this vast project. This platform has been outlined in the resolutions passed at its annual conventions. The considerations which should move Congress in its decision on the various proposals before it are, in order of their importance, as follows:

1. National defense—The positive assurance of maintenance of nitrate plant No. 2 in a state of readiness to meet any war-time emergency.
2. Adequate reimbursement in money to the Government for its own investment in Muscle Shoals.
3. Development of nitrate for peace-time uses, especially fertilizer, at the lowest possible cost on a sound economic basis.
4. The distribution of water power, under the terms of the Federal Water Power Act, to the possible areas for the development of Southern industries.
5. Ultimate opening of navigation on the Tennessee river as an important link in the great Mississippi waterway system.

Elsewhere in this issue is given an account of the joint offer submitted by the power companies of the South. This offer embodies many of these vital considerations.

It leaves the title to the nitrate plants undisturbed in the Government. Under this offer the Government continues to own the power plants. It continues to own them at the expiration of the fifty-year period without restriction on its right to then negotiate for the future use.

The Government is given a return of \$100,000,000 for the fifty-year lease, twice as much as the Ford interests offer and in half the length of time.

An initial reservation of 100,000 horsepower is made for the development of fertilizer.

The distribution of power over the entire South is assured under the terms of the Federal Water Power Act.

The power companies assume the part of the annual charges against headwater improvements in the Tennessee river as determined by the Federal Water Power Commission to be equitable.

We join in the opinion of the Secretary of War "that this plan has many excellent features."

### Charlotte Plans to Build City Hall—Project Calls for Three Buildings.

Charlotte, N. C.—Plans outlined at a conference of the city commissioners and architects provide for the construction of three municipal buildings here on the Liddell property bounded by East avenue, Davidson, Fourth and Alexander streets, which will be known as City Hall square. C. C. Hook and Louis D. Southerland are the architects, and as soon as plans have been completed bids will be invited, in order that contracts may be awarded and construction begun early in the spring.

The central administrative building will occupy the center of the square, while the central fire station will be built at Alexander and Fourth streets and the police station at Davidson and Fourth streets. Cost of the project will not be determined until final plans are made.

### Pennsylvania Railroad Enlarges Motor Truck Service.

The Pennsylvania Railroad Co. has put in operation this month four more motor truck units, making a total of eleven units and twenty trucks now being operated by the system, these taking the places of eleven local trains carrying way-freight in less than carload lots. The new units operated with trucks are from Wilmington, Del., to Perryville, Md.; from Gloucester to Newfield, N. J.; Palmyra to Bordentown, N. J.; and South Amboy to Bordentown, N. J. Studies are being made for the further use of motor trucks and the total of 602 miles of daily truck operation will soon be increased to 1000 miles. Motor truck units previously established on

the Pennsylvania system are as follows: Cambridge to Salisbury, Md.; Pittsburgh to Enon, Pa.; Overbrook to Downingtown, Pa.; Paschall, Pa. to Wilmington, Del.; on the New Alexandria Branch, Pa.; and Pittsburgh to Monongahela City, Pa.

It is the aim of the railroad company, according to a report quoting R. C. Wright, the general traffic manager, to ultimately establish store-door delivery of less than-carload freight and it has worked out three plans for the use of motor trucks in handling this class of freight as follows: 1—Elimination of package local or "peddler" train, motor trucks serving intermediate stations between zone stations, the latter being served by destination cars. 2—Establishment in large cities of break-bulk points away from congested terminals and transfer of freight from the break-bulk points to city stations inbound and outbound, doing away with trap car service. 3—Door to door pick-up and delivery to and from break-bulk points, or store door delivery. The present motor truck service is that described in the first of these plans.

### Wealth of Tennessee Increased 129 Per Cent in Ten Years.

The Department of Commerce's preliminary estimate of the value of the principal forms of wealth in Tennessee is \$4,228,253,000, as of December 31, 1922. In 1912 the wealth of Tennessee was reported at \$1,844,630,000. This is an increase of 129.2 per cent in ten years. Per capita values increased from \$830 to \$1773, or 113.6 per cent.

All classes of property increased in value from 1912 to 1922, except live stock, which decreased from \$126,175,000 to \$115,059,000, or 8.8 per cent. The estimated value of taxed real property and improvements increased from \$745,921,000 to \$2,246,710,000, or 201.2 per cent; exempt real property from \$85,993,000 to \$252,668,000, or 193.8 per cent; farm implements and machinery from \$22,504,000 to \$42,982,000, or 91.0 per cent; manufacturing machinery, tools, and implements from \$50,650,000 to \$145,206,000, or 186.7 per cent; and railroads and their equipment from \$216,745,000 to \$269,323,000, or 24.3 per cent. Privately owned transportation and transmission enterprises, other than railroads, increased in value from \$118,787,000 to \$148,392,000, or 24.9 per cent; stocks of goods, vehicles other than motor, furniture, and clothing from \$477,855,000 to \$957,179,000, or 100.3 per cent. The value of motor vehicles was estimated in 1922 at \$50,734,000.

The report calls attention to the fact that the increases in money value are to an extent due to the rise in prices which has taken place since 1912, and to that extent do not represent corresponding increases in the quantity of wealth.

### Bids to Be Opened March 3 on \$1,000,000 Archbold Memorial Hospital, at Thomasville, Ga.

A telegram from E. C. Wachendorff of Atlanta, architect for the \$1,000,000 hospital to be erected at Thomasville, Ga., by John F. Archbold of New York, as a memorial to his father, John D. Archbold, states that bids for the erection of the hospital, which will embrace three buildings, will be opened at Thomasville on March 3. Contractors invited to estimate include: Algernon Blair, Montgomery, Ala.; Foundation Co. and Turner Construction Co., both of Atlanta and New York; Gude & Co. and Southern Ferro Concrete Co., both of Atlanta.

The buildings will be of reinforced concrete skeleton construction, fireproof, with hollow tile walls and stucco exterior and terra cotta tile roofing. The main building will be three stories and basement, 200-foot frontage with front wings, and service wing in the rear. A building for colored patients will be L-shaped, 90 by 110 feet, two stories, while the nurses' home will be two stories, 140 by 40 feet.

Bids for mechanical work will be received later.



### Construction Begins on Drainage District in Arkansas—32,000 Acres in Valley of Red River.

The MANUFACTURERS RECORD is advised by the Morgan Engineering Co. of Memphis, Tenn., engineers for the McKinney Bayou drainage district in Miller County, Arkansas, that construction work is now beginning on this district, which embraces 32,000 acres of alluvial lands in the valley of Red River, a few miles southeast of Texarkana. Work to be done will include the construction of nine miles of levees and 47 miles of ditches, which will require a total of 2,225,000 cubic yards of embankment and excavation.

Levees will protect the land from the Red River backwater and from overflow from adjacent hills, while the ditch system will provide good interior drainage, so that the lands may be profitably cultivated.

Contracts for the work have been awarded to the Fred M. Crane Co. of Omaha, Neb. Surveys and plans have been made by the Morgan Engineering Co., who will also supervise construction. A bond issue of approximately \$450,000 has been sold to the Liberty Central Trust Co. of St. Louis, and C. W. McNear & Co. of Chicago.

Commissioners for the district are L. C. Kirkland, chairman; H. M. Barney, secretary; R. A. Hanson, treasurer, and M. J. Dorsey, all of Texarkana.

### Fairmont Elks to Erect \$300,000 Building.

Fairmont, W. Va.—Plans have been adopted by the Fairmont lodge of the Benevolent Protective Order of Elks for the erection of a \$300,000 building here. The structure will be seven stories high on the front and five stories in the rear. Space below ground will be used for boiler rooms, coal storage, locker rooms for men and women employees, and other facilities.

There will be a club room, 52 by 58 feet, with an L 24 by 26 feet, while the lodge room, located on the third floor will be 58 by 58 feet. A ball room on the second floor will be 58 by 78 feet, open on two sides and free of columns, with a concert stage 16 by 53 feet. The fifth and sixth floors will be devoted to bedrooms, totaling 74.

John C. Burchinal, Jr., of Fairmont, is the architect, and Brooks Fleming and others the building committee.

### Anglo-German Dyes Combination Being Organized.

Manchester, England, January 28—[Special.]—A statement has just been issued by the directors of the British Dye Stuffs Corporation which states that the negotiations for a working arrangement with the German Dye Stuffs Industry have been proceeding over a long period. The directors say that the statements which have been made public in the press in regard to the Anglo-German agreement were unauthorized and premature. The directors desire to state that they will at once inform the shareholders of the result of the negotiations as soon as there is anything definite to communicate.

### Annual Convention of American Cotton Manufacturers.

The twenty-eighth annual convention of the American Cotton Manufacturers Association, Winston D. Adams, secretary, with executive offices at Charlotte, N. C., will be held at the Traymore Hotel, Atlantic City, N. J., on May 27 and 28.

### Invites Bids on Four Miles of Log Road.

Bogalusa, La.—The Great Southern Lumber Co. will receive sealed bids until March 1 for the construction of about four miles of log road near Georgetown in Copiah County, Mississippi. Profile and specifications are on file at the office here of J. H. Cassidy, assistant general manager of the company.

### STRIKING CONTRAST BETWEEN NON-UNION AND UNION COAL FIELDS.

#### Millions Poured Out to Unionize All Miners.

Huntington, W. Va., February 14—[Special.]—The difference between conditions prevailing in the open and closed shop coal fields of West Virginia is perhaps most strikingly illustrated by a statement made recently by Fred. Mooney, secretary of District 17, United Mine Workers, of Cincinnati, the correctness of which however has been questioned as well as discounted owing to the fact that the mine official in question is prone to exaggerate; but if true it goes to show according to those who have commented on the statement that conditions are much worse in union fields where the miners have been refused permission to work at a scale lower than that fixed by the union. Mooney in his statement declared that "starvation is stalking through the coal fields of West Virginia" and that "starving miners are walking the streets of Charleston and Huntington begging for aid," a condition the existence of which has been denied by the Red Cross, Salvation Army, and other welfare agencies.

It is pointed out however, by Walter R. Thurmond, one of the leading operators of the Logan district that "if there is any suffering it must be in those sections where officials of the union refuse to allow their men to work except at a scale out of proportion to wages paid in other industries."

Commenting on Mooney's statement, Mr. Thurmond said: "There is no starvation in the Logan field. Though market conditions are not all that might be desired, Logan continues to pile up a record production. Monday and Tuesday of this week were two of the best days in the history of the field. More than 2200 cars were loaded in these two days alone.

"Mooney would have the public believe," asserted Mr. Thurmond, "that the union is financially unable to take care of the men whom it will not allow to work except at peak wages, yet the same union is able to pour millions of dollars into West Virginia whenever an 'armed march' or an organized attack on the 'open shop' districts is in progress. The organization's records show district 17 got \$1,428,000 to prosecute the strike in 1922. This was in addition to the million dollars which the district itself raised by means of the check off. The records also show that the international spent more than \$2,500,000 in an ineffectual attempt to organize one section of the state alone. Last year the district received further large sums from the international and a tax placed on the workers' wages gave the officials almost a million dollars more.

"The enormous sums now being spent to defend the officials of District 17, among whom is Mooney himself, on murder and other charges growing out of the 'armed march' on Logan in 1921 alone would be ample to care for any inconvenience union miners may now be experiencing as a result of the coal depression.

"The miners of Logan and the other open shop districts of the state are not only contented but prosperous. They know nothing of the conditions Mooney depicts. We have room for several more workers in the Logan field, provided they are the sort of men who would rather do an honest day's work for an honest day's pay than live in a union tent colony and beg their food on the streets of nearby communities."

### Will Build Automatic Sub-Station.

Kansas City, Mo.—The Kansas City Power & Light Co. plans to build a new automatic sub-station this year, make an addition to a hand-operated sub-station and change the entire station to automatic operation. Plans and specifications have been completed and bids invited.



### **\$1,500,000 Nautilus Hotel at Miami Beach.**

The Nautilus Hotel at Miami Beach, Fla., has been completed by the Bay Shore Corporation at a cost of about \$1,500,000. It is a beautiful structure of six stories, constructed of concrete, hollow tile and terra cotta, with concrete foundations, concrete and hollow tile floors and composition roof. It is equipped with a steam heating plant

and two passenger and two service elevators. In addition to the hotel proper, there are also a dormitory, tea house and cottages.

Schultze & Weaver of New York are the architects for the hotel and Kiehnel & Elliott of Miami, for the dormitory, teahouse and cottages. The George A. Fuller Co., New York, is the general contractor, and John Wanamaker, New York, supplied the interior decorations, furnishings and furniture.



NEW NAUTILUS HOTEL COMPLETED AT MIAMI BEACH, FLORIDA.

### **Plans Soon on \$2,000,000 Ford Assembly Plant.**

Norfolk, Va., February 16—[Special.]—Norfolk contractors who wish to bid upon the construction at Newton Park of the \$2,000,000 assembly plant of the Ford Motor Company, Detroit, will receive plans and specifications within a few days, according to a statement by local attorneys of the Ford company.

Additional property has been purchased and this will furnish a right of way for a spur sidetrack from the Norfolk and Portsmouth Belt Line Railway into the Ford property. An agreement will be drawn with the Belt Line shortly for laying trackage.

Plans and specifications it is said, will be forwarded from Detroit and placed on file in the city building inspector's office, as well as with Norfolk contractors.

Work is expected to start this spring and the plant rushed to completion sometime this summer. When operating to capacity it will employ about 1000 men.

### **Virginia's Wealth Doubles in Ten Years.**

The total value of the principal forms of wealth of Virginia, as reported by the Department of Commerce, amounted to \$4,891,570,000 on December 31, 1922, compared with \$2,364,575,000 in 1912, an increase of 106.9 per cent. Per capita values increased from \$1122, to \$2050, or 82.7 per cent.

All classes of property increased in value from 1912 to 1922. The estimated value of taxed real property and improvements increased from \$1,060,875,000 to \$2,422,957,000, or 128.4 per cent; exempt real property from \$115,229,000 to \$349,416,000, or 203.2 per cent; live stock from \$85,954,000 to

\$92,653,000, or 7.8 per cent; farm implements and machinery from \$19,757,000 to \$35,576,000, or 80.1 per cent; manufacturing machinery, tools, and implements from \$66,657,000 to \$164,146,000, or 146.3 per cent; and railroads and their equipment from \$408,626,000 to \$501,972,000, or 22.8 per cent. Privately owned transportation and transmission enterprises, other than railroads, increased in value from \$103,842,000 to \$178,308,000, or 71.7 per cent; stocks of goods, vehicles other than motor, furniture, and clothing from \$503,635,000 to \$1,083,429,000, or 115.1 per cent. The value of motor vehicles was estimated in 1922 at \$63,113,000. No separate estimate was made for motor vehicles in 1912.

### **"Cotton Belt" Runs a Cotton Demonstration Train.**

The St. Louis Southwestern Railway or "Cotton Belt Route's" announced plan for the operation of a cotton demonstration train over its lines provided for a start at Tyler, Tex., February 18 and a finish on March 5, stops to be made at all important stations in Texas, Louisiana, Arkansas and Missouri, the train being under the direction of the agricultural department of the company with P. T. Cole, agricultural commissioner and G. V. McNalie, horticultural commissioner in charge thereof. It was also announced that cotton experts from the United States Department of Agriculture, from the Texas State Department of agriculture and from other state departments as well as from the Agricultural & Mechanical College of Texas would go along. Lectures and demonstrations on every phase of cotton production are being given, the idea being to raise more and better cotton on less acreage and also to promote diversification of crops, so that farmers can raise all their own food and feedstuffs possible.

## A Serious Charge Against Some Southern Municipalities for Lack of Attention to Bond Interest Payments.

John Nuveen & Company  
Municipal County & School Bonds

Chicago, January, 25.

*Editor Manufacturers Record:*

In your DAILY BULLETIN of January 19 you have an article about "Georgia Business Men Planning for an Upbuilding Campaign." One paragraph in that article reads as follows:

"There are enough energy and initiative and capital and broad-visioned men in Georgia to put that state to the front and make it command for its resources and its advantages the attention of the entire country. But these people must be willing to spend money, and spend it freely, and spend it year after year. They must be willing to inaugurate a campaign which will be intelligently and energetically managed by men of ability, and the newspapers of Georgia must to a greater extent than they are doing concentrate their attention upon everything which is a foundation for optimism."

There is a very serious condition in Georgia which I want to bring to your attention. Twenty-five years ago the municipal bonds in Georgia were held in high esteem and were sold at prices that equaled the prices received for municipal bonds in the North. This condition has changed for the worse, as can be testified by a great many municipal bond houses. The smaller municipalities issue bonds and the officials do not seem to care whether the interest and principal are paid promptly. In fact, in some cases there are serious defaults. If this only held in one instance it would not be serious, but the writer knows of at least half a dozen such instances.

The state officials have been approached with regard to this condition, but they do not seem to think it is their duty to aid in any way in correcting this very serious condition. The article in your magazine we think explains this to a great extent in the paragraph where you state:

"But when politics instead of industry and agriculture became the dominant thought of the state, when law-breaking and mob violence gave to Georgia an unfavorable name throughout the land, there was a halting in its material progress, or rather in the spirit which is back of all material progress. Men thought more and talked more about some political candidate for office whether a county job, a governorship or that of United States senator than of material advancement."

The writer has written to men of prominence with whom he is acquainted in the state. He has written to bankers and others, but they do not seem to think the matter at all serious.

There is no question if this condition continues for a few more years that the credit of the municipalities in the state and also the state of Georgia will be much injured, as the fact of these defaults will gradually get out and the credit of the state will be no better than the states of Alabama and Arkansas. In strong contrast to Georgia, the credit of North Carolina twenty-five years ago was not good. Today people are willing and anxious to secure the bonds of North Carolina, as the people in that state seem to take pride in seeing it advance and are prompt in their payments of their obligations. What a contrast to the state of Georgia that had good credit twenty-five years ago and is now going backward instead of forward!

I do not wish to trouble you with regard to these things, but thought that it might be well for you to know of this condition of affairs in Georgia, and also thought that you might bring pressure to bear on some of the influential citizens of the state so that the conditions that exist might be corrected.

S. Garard & Co., 39 S. LaSalle St., Chicago, and the Hanchett Bond Co., at the same address, could also give you some information as to defaults in Georgia.

J. C. SMITH.

## \$2,000,000 Scottish Rite Cathedral at St. Louis.

Construction of the new Scottish Rite Cathedral at St. Louis, which is estimated to cost in excess of \$2,000,000, is expected to be finished within the next few months. The building is being erected by the Scottish Rite Cathedral Association and is designed to accommodate a membership of at least 15,000. It is 235 by 185 feet, six stories of steel,



SCOTTISH RITE CATHEDRAL UNDER CONSTRUCTION AT ST. LOUIS AT COST OF OVER \$2,000,000.

concrete and stone construction, with concrete foundation, marble and concrete floors and concrete roof with asphalt waterproofing.

The building contains a total of 4,600,000 cubic feet, the interior being divided into rooms adapted to the purposes of the order and includes an auditorium to seat more than 3000. There will also be a large banquet hall. William B. Ittner is the architect and the John Hill Construction Co., general contractor, both of St. Louis. Subcontractors include the Edwards Heating Co., for heating and power equipment; Dorsch Electric Co., wiring, switches, etc., and the Ryffel & Ratz Plumbing Co., plumbing and sewerage, all of St. Louis.

The installation of one freight and two passenger elevators has been deferred.

## Kentucky's Wealth Increases Over 60 Per Cent.

According to a preliminary estimate of the Department of Commerce, the total value of the principal forms of wealth of Kentucky increased from \$2,235,353,000 in 1912 to \$3,582,727,000 in 1922, or a gain in ten years of 60.3 per cent. Per capita value increased from \$963 to \$1459, or 51.5 per cent.

All classes of property increased in value from 1912 to 1922, except live stock, which decreased from \$136,524,000 to \$112,090,000, or 17.9 per cent. The estimated value of taxed real property and improvements increased from \$1,023,754,000 to \$1,683,911,000, or 64.5 per cent; exempt real property from \$115,679,000 to \$181,028,000, or 56.5 per cent; farm implements and machinery from \$21,962,000 to \$34,593,000, or 57.5 per cent; manufacturing machinery, tools, and implements from \$41,219,000 to \$97,856,000, or 137.4 per cent; and railroads and their equipment from \$256,492,000 to \$314,731,000, or 22.7 per cent. Privately owned transportation and transmission enterprises, other than railroads, increased in value from \$91,800,000 to \$161,804,000, or 76.3 per cent; stocks of goods, vehicles other than motor, furniture, and clothing from \$547,923,000 to \$939,377,000, or 71.4 per cent. No separate estimate was made of the value of motor vehicles in 1912. In 1922 the value of motor vehicles was \$57,337,000.



## NEWS AND VIEWS FROM OUR READERS

[Publication in this department of letters from our readers does not mean that we either approve or disapprove the views expressed. We believe in a full and frank discussion of the mighty questions of the hour, for only in this way can the truth be found. Therefore we often publish letters with which we do not agree.—Editor Manufacturers Record.]

### An Appeal for Law.

MATTHEW WILLIAM POTTS, Consulting Engineer,  
New York City.

It was with interest that I noticed the letter under the heading "A Young Girl's Appeal for Law," by Katherine Wilkman, Long Island City, N. Y., appearing in a recent issue of the MANUFACTURERS RECORD. After reading the letter I referred to the address which had previously appeared in the MANUFACTURERS RECORD, in order to gain a background of the young girl's viewpoint.

Mention is made in the second paragraph of "real stuff." It seems to me that the journals, magazines and newspapers of the country are somewhat afraid to publish the truth. They only publish what appeals to their advertisers and financial backers. The real stuff if presented, would certainly appeal to the majority of readers, both old and young, and would give them something worth while to talk about, instead of this present hodge-podge, or in the vernacular of the street "dirt" which they are now discussing at parties and places where old and young assemble.

It is true, as the young girl expresses it, that to speak differently from others is to be considered "biased, narrow-minded and mentally unbalanced." My own experience has proved that while I am considered a good fellow, because of having some so-called old fashioned ideas differentiating between friends and acquaintances, I am dubbed a prude. Because I will not take an arbitrary view point on certain subjects without concrete evidence or proof, I am considered to have no mind of my own.

I doubt if the best way to teach the older people of the nation is through their children in the Sunday Schools and in the public schools. The reason why I say this is that the majority of Sunday School teachers are unable, or are restricted by their church creeds, dogmas, and doctrines, from expressing the truth. Public school teachers are likewise handicapped by the boards of education. Restrictions on these teachers are not based on right or wrong, but upon the opinion of individuals who in a number of instances are openly flouting the law, or are in favor of putting forward propaganda for political ends.

In the matter of advertisements, I do not know the exact nature of the copy submitted with the above mentioned letter, but it brings to my mind the many advertisements which I have seen for hops, stills, and other paraphernalia which will eventually be used to violate the laws of the country. These advertisements only strengthen my previous statement that the papers, journals and magazines of the country do not speak the truth, nor do they stand for the principles of truth, or for the principles of so-called law and order. They try to tell us that they publish scandal, murder, sedition, law violation, etc., because it is what the public wants. I wish to contradict this statement on my own behalf, and say that I believe the majority of people would prefer to read a paper without having to first wade through such trash.

My answer to the young girl's question, "What can be done about it," would be as follows. We should insist upon cleaner journalism in the country, and the periodicals should be made to put forth free speech and publish both sides of all controversies, such as the Russian question, the Ruhr situation, etc., and in this way much can be done to educate both old and young, and the more real, true knowledge we have in the country, the more it will react in such a way

that teachers will be able to express the truth without fear of being persecuted, for doing so. When the truth is published and spoken, rich and poor treated alike, when the same laws apply to each and every individual, regardless of money power and no exceptions to the law are made, we can then expect obedience to the law, but until that time the law rests upon public opinion and the individual.

### A Bank's View as to How a Change in Management Has Changed for Good the Methods of the Federal Reserve System.

E. T. CASHION, Vice-President Bank of Eudora, Eudora, Ark.

I have just read the article in your issue of December 27 headed "Governor Crissinger of the Federal Reserve Board on the Par Clearance Question Again."

I was especially interested in the quotations from the letter of the Western banker who was afraid to have his name published. I judge that this Western banker would like to withdraw his institution from the Federal Reserve par list and again go back to the exchange basis, but he also seems to be afraid to put his desires into practice.

Let me assure this banker that he need not hesitate to withdraw from the list now, and if he does so, his institution will not be menaced or coerced by the Federal Reserve banks.

Our own institution has recently withdrawn from the par list, and in taking this step we were influenced largely by Governor Crissinger's own letter of October 25, 1923, to L. R. Adams, General Secretary of the National and State Bankers' Protective Association of Atlanta, Ga., in which Governor Crissinger stated that "all Federal Reserve Banks have been advised of the Board's ruling that the use of agents, other than banks, for the purpose of collecting at par items drawn on non-par remitting banks, be discontinued."

Before we reached a complete decision in this matter, we took it up very frankly with the Little Rock Branch of the St. Louis Federal Reserve Bank, through whom our own items had been clearing. While the Little Rock Branch urged us to remain upon the list, their expressions were open, fair and courteous and there was no indication that force or coercive measures would be adopted to force us to remain upon the list.

Of course it will be a long, long time before the country bankers entirely forget the crude methods which were employed by the Federal Reserve Banks a few years back, when practically every bank in the United States was forced upon the par list, yet, there is now an indication that the officials of the system realize those initial methods were repulsive and wrong.

We believe the purposes for which the Federal Reserve system was organized are laudable and that the system has long since passed the experimental stage. In the past we have criticized some of the methods and especially those which were employed to force non-member banks upon the par list, but since the board of governors have now removed the chokers by openly permitting non-member banks to remain or to withdraw from the par list, we think a much more friendly feeling will and should exist between the system and the non-member banks.

Of course the present Congress may enact some legislation which may again put the non-member banks back upon the list, but we believe that Congress should consider legislation which will permit the Federal Reserve banks to make a collection or exchange charge, and thus enable the country banks to do likewise without any misunderstanding.



## THE IRON AND STEEL SITUATION

### Heavy Production of Steel Despite Absence of Large Orders.

Pittsburgh, Pa., February 18—[Special.]—The steel trade is in a condition almost unprecedented, in that there is very heavy production, with a good flow of new business, and yet there are no special developments and no individual orders of particular consequence. Usually when there is a lack of special developments there is a dull market with little mill activity, and when production is heavy there are special orders of consequence and scarcity of one commodity or another.

Now that the production of steel ingots in January has been reported, a fair approximation to the present rate of mill operations is possible. The January output was 3,599,938 tons, representing an average daily rate for the 27 working days of 133,331 tons, corresponding to a rate of 41,500,000 tons in a year. As production increased rapidly early in the month, from a rate of 35,400,000 tons a year in December, and at a slower pace late in the month, the rate at the close of the month may be taken at 43,000,000 tons a year or a trifle more, and with further increases this month the present rate may be set at somewhere around 45,000,000 tons a year.

By any comparison this is a high rate. It is 27 per cent above the December rate, the lowest last year, only 8 per cent below the rate of last April, the highest in steel industry history, and about 5 per cent above the average of last year.

In view of the season of year the present rate of consumption cannot be supposed to be above last year's consumption, but there has been a general disposition among buyers in the past two months to replenish stocks, which it appears were quite well liquidated in the late months of the old year, when there was much doubt whether steel prices would hold. When the market showed that prices were holding buyers decided to replenish stocks, as they saw a good spring business before them.

The majority of steel producers now insist that the steel market is taken care of to the middle of the year, that it has enough swing to provide for good mill operation and to keep prices steady. Beyond the middle of the year they are indisposed at this time to predict.

Steel buyers may also have confidence in the steel market for the next four months, but they feel there is no occasion to buy far ahead on that account, seeing that the steel mills are working smoothly and early deliveries can be obtained on new orders.

No line of trade is decidedly more active than another. The buying of steel comes from all over the country and from all consuming industries. There are some slight differences. For instance, rails and tubular goods are probably in heavier demand, relative to capacity, than are plates and wire products.

The rail mills are operating substantially full and are being pressed for deliveries despite its being so early in the season. Some additional business has been booked by Chicago. The mills will have to carry some rail tonnage over July 1 and will probably open their order books soon for deliveries in the second half of the year.

Fabricated steel tonnage is being placed at a fair rate. The average of bookings since the first of the year runs below the rate in December, which month showed exceptional activity.

The Norfolk & Western has ordered 4000 hopper coal cars of 70 tons capacity and the Santa Fe has ordered 2000 refrigerator cars. The New York Central has a large car buying

program but the orders may come out slowly. All car orders are negotiated very vigorously as to prices.

While steel prices are being maintained, and are with the exception of some minor lines at the levels of last April, prices are not particularly strong. While some lines, like rails, nails and pipe, are held rigidly, others are the subject of occasional or frequent concessions. There is less weakness in the market than in the last two months of the old year.

Pig iron has been very quiet and it is becoming doubtful whether the valley furnaces will be able to establish their recently advanced asking prices, \$24 on Bessemer, \$23 on basic and \$24 on foundry, f. o. b. valley furnaces, freight to Pittsburgh being \$1.76. Buffalo furnaces are quoting foundry iron in competitive territory at \$22, furnace, which would beat the valley furnaces in a considerable part of what is normally valley territory.

Connellsville furnace coke is stiffer in the spot market, recent floating supplies being well absorbed, while second quarter business is not so promising, prospective buyers being unwilling to pay advanced prices the operators have been asking.

Heavy melting steel scrap is easier, being quotable at \$21.50, delivered Pittsburgh district, against \$22 quotable for three weeks past. There has been no local buying in the past week, while the eastern market is easier, permitting more scrap to seek the Pittsburgh district for an outlet.

### Additional Strength Manifest at Birmingham.

Birmingham, Ala., February 18—[Special.]—The Southern pig iron market is stronger this week than last in several ways. The quotations have advanced, iron now selling at from \$23.00 to \$24.00 per ton. No. 2 foundry, inquiries being received for iron to be delivered into the third quarter and consideration being given to additional production before long. The tonnage being sold is not as large as it was a few weeks back but the furnace interests have sold up well on present speed of production for several weeks and can wait a little time with patience for further activity in the way of selling.

The Alabama Company the past week, manufacturing machine-cast and special brand iron, announced sales of iron on a \$24 per ton base, No. 2 foundry. This company has one blast furnace in operation and a second one is under repairs and will be placed in commission shortly after the turn of the month. Twenty-four blast furnaces are in blast in Alabama now, 12 on foundry and 12 on basic. The surplus stock of iron has been reported as going down for the past two and a half months and the amount available for the open market cannot be very great. Furnace interests are urging consumers to accept iron as quickly as possible and transportation service is good. Prompt delivery is noted in all directions.

Small lot buying has predominated the market again recently. Home melters have been satisfied to continue the hand-to-mouth manner of trading in the iron market. In several instances, some of the steady melters have found the quotations advanced fifty cents and while complaint has been raised it was to no avail. The policy of buying in small tonnage was deplored by the furnace interests but the consumers have thought the plan best.

Negotiations were heard of recently for a round tonnage of iron but no big deal has been reported consummated this month. The Standard Sanitary Manufacturing Company, some of the cast iron pipe companies, pressure pipe makers and others are said to have purchased tonnages above the 10,000 ton mark but information obtainable has been that these deals were closed last month. Stove and heating apparatus makers have indicated a need for iron, stove and

range manufacturers, radiator makers, etc., and there will be a steady melt of iron noted in these circles. The cast iron pipe industry shows further improvement, the pressure pipe makers in particular receiving lettings every week and adding to their business on books right along.

New business from the middle west is not as active as it was a few weeks ago but the lull is considered temporary.

Coal mining industry reports a little dullness in the Alabama field. The larger and prominent coal producers of the district assert that the market is quiet and that the past 60 days were rather dull. Steam coal in particular has not found as good demand as expected. Production has been showing a steady increase since the first of the year. For the first week of 1924 Alabama was given credit for 325,000 tons and the past week the tonnage was around 300,000 tons.

The coke market is showing a better tone so far as demand is concerned but the quotations continue low. Bee-hive coke is selling around \$5.50 to \$6.50 per ton, foundry, while by-product ranges from \$5 to \$6.50, foundry. Production is being maintained on the pace which has been on for the past six weeks and shipments are steady. One of the independent bee-hive coke producers announces that shipments last month and in December were as heavy as at any time heretofore but that the low price permitted no showing to be made.

The scrap iron and steel market is showing some improvement and sales are being made for delivery into the second quarter. The price list of the various products shows very little change for the past two weeks. Cast iron pipe makers are buying No. 1 cast as the pig iron prices advance. Stocks are still good and expectations are for active business for some time. One dealer reports inquiries into the third quarter but no sales sought.

Rearrangement of the Warrior River service by the Government provides for shipment of the greater portion of the coal which has been going through the port of Cordova, the upper port on the navigable stream, by rail to Mobile and New Orleans. Such coal which has no railroad outlet will still be handled on the Warrior. The floating equipment is to be increased so as to care for an increased tonnage of iron and steel products through Birmingham. The embargo heretofore instituted against Tuscaloosa and Demopolis, on the Warrior, is to be relieved and traffic will be handled at those points. A plan to divorce the Warrior from the Mississippi River was first discussed but abandoned and then the plan of eliminating practically all of the coal hauling and increasing the facilities for the iron and steel products, a saving in the monthly costs and an increase in the earnings being expected. Much tonnage is being shipped down the Warrior for export through the port of Mobile and also for shipment to the far west.

The Birmingham Machine & Foundry Company has completed a number of new floors to its pipe shops. This plant is also working on cotton gins and compresses combined.

Quotations for pig iron and iron and steel scrap follow:

#### PIG IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$23.00 to \$24.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$23.50 to \$24.50; iron of 2.75 to 3.25 per cent silicon, \$24.00 to \$25.00; iron of 3.25 to 3.75 per cent silicon, \$24.50 to \$25.50; iron of 3.75 to 4.25 per cent silicon, \$25.00 to \$26.00; charcoal iron, f. o. b. furnaces, \$33.00 to \$34.00.

#### OLD MATERIAL.

Old steel axles.....	\$19.00 to \$20.00
Old iron axles.....	21.00 to 21.50
Old steel rails.....	12.00 to 13.00
Heavy melting steel.....	14.00 to 15.00
No. 1 cast.....	20.00 to 20.50
Stove plate.....	16.50 to 17.00
No. 1 R. R. wrought.....	12.00 to 13.00
Old car wheels.....	17.00 to 18.00
Machine shop turnings.....	7.00 to 8.00
Cast iron borings.....	9.00 to 10.00
Cast iron borings, (Chem.).....	15.00 to 16.00

At a recent election in Rutherford County, North Carolina, a bond issue of \$200,000 for schools was authorized by a vote of 435 to 90.

## RAILROADS

### Concerning a Reported Sale of Bonds for an Interurban Railway.

In last week's issue we published a letter from Captain Edward Kennedy, general manager of the Houston, Beaumont & Orange Interurban Line, Houston, Tex., stating that the bonds had been sold for the building of this road. The MANUFACTURERS RECORD has no other information on the subject than the letter from Captain Kennedy which it published, crediting as we did all of the statements to him. Hence this explanation that all that we know on the subject was contained in Captain Kennedy's letter.

### Increased Earnings and Enormous Traffic of Railroad Lines in 1923.

The net operating income of Class One railroads having a total of 235,667 miles of line aggregated \$977,543,590 for the year 1923 which was at the rate of 5.10 per cent on their tentative valuation, according to complete reports compiled by the Bureau of Railway Economics from returns made to the Interstate Commerce Commission. In 1922 the aggregate net operating income of these roads was \$776,880,592 or at the rate of return of 4.14 per cent. In the Southern district during 1923 the rate of return was 5.84 per cent; in the Eastern district 5.40 per cent; in the Western district 4.57 per cent.

Net operating income is what is left of the revenues after the payment of operating expenses, taxes and equipment rentals, but before the payment of interest and other fixed charges.

The total operating revenues of these railroads last year was \$6,356,883,424, an increase of \$736,481,703 or a little more than 13 per cent as compared with 1922. Operating expenses totaled \$4,944,011,124 an increase of \$486,388,653, or nearly 11 per cent.

Freight traffic on the Southern railroads during the year increased very nearly 19 per cent over the preceding year. Their operating revenues increased 13½ per cent, but their operating expenses increased a little more than 13 per cent.

Seventeen railroads of Class One operated at a loss in 1923, nine of them in the East, one in the South, and seven in the West.

The volume of freight traffic carried by all the railroads was unprecedented. This traffic amounted to an aggregate of more than 457,500,000,000 net ton miles an increase of over 10,300,000,000 net ton miles, or 2.3 per cent as compared with the total for 1920 which was the previous record year. As compared with 1922 the increase was about 21¼ per cent.

### Chesapeake & Ohio Proposes \$4,500,000 Worth of Work at Huntington, W. Va.

Contemplated improvements at Huntington, W. Va., and in that vicinity, by the Chesapeake & Ohio Railway Co., according to a report from there quoting Vice-President G. B. Wall, include construction of a third track from Huntington to Kenova, W. Va., 8 miles, track improvements in the yards at Huntington, besides construction there of office buildings for stores and mechanical departments, an extension of the roundhouse, a new erecting shop, two new machine shops, an extension of the Mallet locomotive shop, a new boiler shop, a passenger car shop, a passenger car paint shop, a paint and oil storage building, a truck shop, a water treating plant, some track elevation, and the installation of signals with track changes at one point. The estimated cost of all these proposed improvements is approximately \$4,500,000. If such an improvement plan, is adopted, it would require two years for completion.



### International-Great Northern Sale to Gulf Coast Lines Agreed Upon.

Announcement was made in New York last week that an agreement has been reached between the bankers interested as to the terms of the sale of the International-Great Northern Railroad, to the New Orleans, Texas & Mexico Railway Co., this agreement being subject to approval of the Interstate Commerce Commission as well as to the action of the holders of voting trust certificates of the property to be sold and to the action of the purchasing company. No doubt is expressed that the plan will go through. It is stated that according to the terms agreed upon certificate holders will receive \$30 per share for their interests, while the holders of adjustment bonds of the International-Great Northern will be guaranteed not less than 4 per cent on their securities from 1924 to 1927 inclusive, but they will in return extend to the purchasing company an option to purchase the bonds at \$5 and interest up to January 1, 1928.

The acquisition of the International-Great Northern Railroad by the New Orleans, Texas & Mexico Railway Co., or Gulf Coast Lines, will give the latter a total of 2333 miles of line. The first named road has 1160 miles of line connecting Galveston, Houston, Fort Worth, Austin, San Antonio, Waco and other points in Texas, while the other has a main line from New Orleans, La., to Brownsville, Tex., together with several branches. Connection between the two systems is at Houston.

### Plan to Continue Operation on Part of a Georgia Road.

According to a report from Savannah it seems probable that that portion of the Midland Railway between Statesboro and Stevens Crossing, Ga., 40 miles, will be continued in operation by the Georgia & Florida Railway organization. Recently the rails on that part of the Midland Railway between Stevens Crossing and Portal, Ga., about 28 miles southeast of the first named place were sold under a court order to H. C. Weller, of Birmingham, Ala., who also bought the rest of them, and it was from him that the Georgia & Florida Railway has acquired the rails. Negotiations are now in progress it is stated to purchase the right of way from Harry Kaplan and Samuel Lovett who bought it at the sale. Business men of Statesboro and Portal are reported negotiating with Mr. Weller for the twelve miles of rails between those points, as they want to be assured of railroad facilities there in any event, but it is expected that the larger plan of running trains all the way from Stevens Crossing to Statesboro will be fulfilled. The Georgia & Florida Railway is under the management of John Skelton Williams, of Richmond, as receiver. Another report says that if arrangements cannot be consummated to fulfil this plan the rails will be taken up and used elsewhere on the line of the Georgia & Florida Railway.

### Loadings of Freight Continue to Break Records.

Unprecedented loading of revenue freight for this time of year is being reported by the railroads to the American Railway Association. The total for the week ended February 2 was 929,936 cars, this being, it is stated, the largest number laden during any one week in any January or February on record. This was an increase of over 38,600 cars as compared with the preceding week, increases being reported in shipments of all commodities excepting live stock and coal. As compared with the corresponding week of last year the increase was more than 64,500 cars and with the same week of 1922 more than 182,000 cars. It was, furthermore, an increase of over 167,000 cars as compared with the corresponding week of 1920.

### NEW \$3,000,000 RAILROAD SHOPS AT BIRMINGHAM.

#### Southern Railway to Erect Twenty-Two Buildings and Employ Twelve Hundred Men.

Birmingham, Ala., February 18—[Special].—The locomotive erecting shop and car works to be built at the Finley yards of the Southern Railway, where an immense development has already begun, will be the last word in construction, according to an authoritative statement covering the plans which have been decided upon. When completed the new works will give employment to not less than 1200 mechanics and the biggest and most difficult locomotive work will be done here as well as the repairing of all kinds of cars as well as the building of cars. It is estimated that the work will cause an expenditure of not less than \$3,000,000. Dwight P. Robinson & Co., New York, are the engineers and general contractors.

All the principal buildings will be of fireproof construction, brick and steel being used almost exclusively. The structural steel will be fabricated in Birmingham by the Virginia Bridge and Iron Company.

The new shop will do all locomotive work for the Southern Railway Company and the Alabama Great Southern Railroad in Birmingham. It will be equipped to handle the largest locomotives and the heaviest steel cars. The shop will be built in two distinct units, one for the repair of locomotives and the other for the building of and repair of cars.

The locomotive repair shop will be of the tranverse type and will include the following buildings: Erecting shop, 80 by 568 feet; machine shop, 95 by 468 feet; boiler shop, 100 by 240 feet; smith shop, 100 by 280 feet; forge shop, 30 by 80 feet; flue shop, 50 by 80 feet; power house, 90 by 97 feet; storehouse and office, 55 by 200 feet; paint shop, 24 by 60 feet; tank, (tender) shop, 100 by 158 feet; firing-up shed, 45 by 100 feet; wash and locker building, 42 by 128 feet.

The car repair shop will include the following buildings: Steel car repair shop, 108 by 598 feet; annex machine shop, 52 by 158 feet; wheel shop, 55 by 125 feet; dry lumber shed, 41 by 240 feet; woodworking mill, 100 by 243 feet; paint-house, 25 by 50 feet; scrap dock, 52 by 400 feet; reclamation shop, 35 by 60 feet; wash and locker building, 36 by 90 feet.

The steel car shop will include three longitudinal bays; one of these will be served by two 15-ton cranes with 35-foot span and another by two 20-ton cranes with 40-foot span, all traveling the entire length of the building.

### To Build a Short Line in Texas.

The Rio Grande City Railway Co., of San Antonio, Tex., capital stock \$22,000, has been incorporated in that state and proposes to build a railroad from Sam Fordyce in Hidalgo County to Rio Grande City in Starr County, a distance of 22 miles. It is expected to begin construction soon. John B. Carrington, one of the incorporators, is reported saying that 95 per cent of the rights of way has been obtained and that all the necessary material has been received. The incorporators and directors are Albert Steves, Franz C. Groos, J. B. Carrington, S. B. Ricarby, Percy Terrell, J. H. Savage, Wallace Carnahan, Jr., Frank Winerich and H. Lee Ransom, all of San Antonio. Connection with the Gulf Coast Lines will be made at San Fordyce.



### **The Proposed Clinchfield Railway Lease and Its Conditions as Suggested by the Interstate Commerce Commission.**

The Interstate Commerce Commission has notified all persons who have intervened or filed appearances in the matter of the joint application of the Atlantic Coast Line and the Louisville & Nashville railroad to lease the Carolina, Clinchfield & Ohio Railway and its subsidiaries that they are requested to file within fifteen days from February 9, views regarding the arrangement to be sanctioned in case the decision of the Commission is favorable to the lease upon terms that will safeguard all interests.

It is especially advised that specific consideration should be given to suggested features of a lease under conditions providing that the Clinchfield route shall be maintained as a separate corporation, that the Louisville & Nashville shall within six months file application to build the proposed connections between its McRoberts line and its Harlan County, Ky., branch and the Clinchfield railway; also that existing routes heretofore established by either carrier in connection with the Clinchfield shall be preserved, existing gateways for interchange of traffic with other carriers shall be maintained, and the present neutrality of handling traffic by the Clinchfield route shall be continued so as to give equal opportunity for service to and from all connecting lines reached by the lines of the Clinchfield companies without discrimination as to routing or movement of traffic which is competitive with traffic of the applicants for the lease, or of either of them, and without discrimination against such competitive traffic in the arrangement of schedules; also that the Clinchfield shall be permitted to be used for through traffic as at present conducted or hereafter to be conducted via present gateways or gateways to be established in connection with the proposed construction of the Louisville & Nashville Railroad to connect with the Clinchfield. The general idea expressed in the suggestions is that the entire Clinchfield route shall be preserved and maintained as an open route available to all carriers connecting with it. Furthermore, the lease, it is stated should be such as to terminate whenever the Commission so orders in order to carry out the plan for consolidation of railroads.

In conclusion it is said: "It should be clearly understood that the Commission has taken no definite position regarding the proposed conditions. Interested parties may file briefs up to March 1."

The notice was signed by Chairman H. C. Hall.

### **Cost of Installing Train Control Would Cost \$200,000,000, It Is Claimed.**

Six railroad presidents were appointed at a meeting held in New York City last Friday to represent the carriers in their efforts to have the Interstate Commerce Commission reconsider its order of January 14 requiring 94 Class One railroads to install automatic train control devices by February 1, 1926. This sub-committee is composed of Samuel Rea, of the Pennsylvania Railroad; W. J. Harahan, Chesapeake & Ohio Railway; Ralph Budd, Great Northern Railroad; L. A. Baldwin, Missouri Pacific Railway; W. L. Mapother, Louisville & Nashville Railroad, and N. D. Maher, Norfolk & Western Railway.

Railroad officials declared, it is stated, that to fulfil the requirements of the order it would be necessary for the roads to spend \$200,000,000 and this is only a small part of what would be necessary to completely equip the lines with automatic train control devices, for the order provides that such control must be established on but two divisions each for one-half of the total number of railroads affected and on one division of each for the other half.

It is further stated that a reopening of the subject before

the commission will be asked upon the ground that the manufacture of train control devices is not yet advanced to such a position that all devices now on the market would prove acceptable; also that the cost of installation at present would be prohibitive; about twenty concerns are making train control equipment and bids submitted thus far have much exceeded the expectations of railroad operating officials.

### **Live Stock Industry Increasing in the South.**

Atlanta, Ga.—More cattle, hogs and other domestic animals were carried on the Southern Railway System in 1923 than in any other year, the increased number shipped showing the greater attention now being given to the live stock industry in the South. The Live Stock Department of the company reports that 23,620 carloads of live stock were moved during the year, an increase of 2480 cars or about 11½ per cent over 1922, these including 612,634 hogs, 248,647 sheep, 233,326 cattle, 101,524 calves, 50,679 mules, and 22,299 horses. Although live stock is transported in special equipment and requires unusual attention with facilities for feeding and watering en route, the report points out that the average receipts of the company from live stock shipments in 1923 was only \$47.43 per car.

### **Township Bonds to Build Railroad.**

Bruce Craven, attorney at law, Trinity, N. C., informs the MANUFACTURERS RECORD that the financing of the railroad extension of 6½ miles of standard gauge railroad to be built by the Snow Hill Railway Company, Inc., as recently reported, will be mainly by a bond issue of \$100,000 of 6 per cent bonds of Snow Hill Township, which were voted some time ago and which are disposed of through his agency. The new line, which will be operated by the East Carolina Railway Co., J. T. Hagans, Superintendent, will run from Snow Hill to Hookerton, N. C., as already noted. Work is expected to begin in April and to be completed within eight months. Mr. Craven has charge of the financing in connection with the construction work as well as with the legal side of it.

### **New Equipment.**

Norfolk & Western Railway has ordered 4000 hopper cars of 70 tons capacity each viz. 2000 from the Ralston Steel Car Co., 1000 from the Pressed Steel Car Co., and 1000 from the Virginia Bridge & Iron Co.

Atchison, Topeka & Santa Fe Railway has ordered 2000 refrigerator cars of which 1000 will be built by the Pullman Company and 1000 by the American Car & Foundry Co.

Seaboard Air Line has ordered 300 freight cars from the Anniston Electric Steel Corporation.

Equipment inquiries reported in the market include 50 steel ballast cars of 50 tons capacity each for the Atlantic Coast Line, 25 baggage cars, and 5 combination baggage and mail cars for the Chicago, Burlington & Quincy Railroad.

### **Advertising Helped Improve Electric Railway Results.**

The condition of electric railways throughout the country improved during 1923 according to a statement credited to B. I. Budd, president of the American Electric Railway Association. There was an aggregate of 16,000,000,000 passengers and also a marked increase in freight and express business, the latter of course on interurban lines. There was an increase in operating expense, particularly in wages. Fares for city service fell slightly averaging for the country 7.14 cents. The increased use of advertising was given credit for part of the improvement, although better service and elimination of bus competition also affected the results.

## GOOD ROADS AND STREETS

### \$2,000,000 FOR ROAD AND BRIDGE CONTRACTS IN TENNESSEE.

#### Work Includes 83 Miles of Road and Number of Bridges.

Nashville, Tenn., February 16—[Special.]—Contracts for road and bridge work to cost nearly \$2,000,000, have been awarded by the Commissioners of Highways and Public Works. Construction involved embraces a total of 83 miles of road and a number of bridges. The following projects and awards are included:

For 14.41 miles of concrete paving, grading and drainage in Sullivan County, with two bridges, Dickson Contracting Co. of Savannah, Ga., was awarded contract at \$583,186; 16.07 miles of grading with drainage structures, in Haywood County, Little & Dean, Memphis, Tenn., at \$106,700, and for 14 bridges on the same section, Parham Construction Co., East St. Louis, Ill., at \$233,891; 13.64 miles of bituminous macadam on stone base, with grading and drainage structures in White County, Boyd Williams, Murfreesboro, Tenn., \$376,971, and for 13.49 miles of grading with small drainage structures, in Perry County, the C. & G. Construction Co. of Hohenwald, Tenn., was awarded contract at \$82,659.

A. M. Cook of Oneida, Tenn., was awarded contract at \$168,489 for 15.56 miles of grading in Cumberland County, with drainage structures and three bridges; .63 miles of grading with small drainage structures in Montgomery County, Federal Construction Co., Nashville, Tenn., \$15,636; 7.60 miles of cement concrete pavement in Coffee County, including rough grading and small drainage structures, with two reinforced concrete bridges, Citizens Engineering & Construction Co., Savannah, \$114,105, and for 2.25 miles of waterbound macadam in Greene County, including channeling, shoulders and ditching, Anderson & Scott of Harriman, Tenn., were awarded contract at \$14,257.

For building a reinforced concrete overhead grade structure over the Southern Railroad tracks in Knox County, the Emory Construction Co. of Knoxville, Tenn., was awarded contract at \$18,150; bridge over Roaring River in Jackson County, consisting of one 114-foot steel span and 18 wooden spans, General Construction Co., St. Louis, \$44,734; reinforced concrete bridge of two 30-foot spans over McBride's Branch in Coffee County, J. B. Ramsey, Lawrenceburg, Tenn., \$6060, and for rebuilding steel bridge of one 220-foot span and two 144-foot spans over Clinch River in Anderson County, Vincennes Bridge Co., Vincennes, Ind., at \$9807.

### Macon Plans Vote on Bond Issues Totaling \$600,000.

Macon, Ga., February 16—[Special.]—An ordinance has been introduced in the city council of Macon calling for an election on April 14 to obtain the assent of qualified voters to the following bond issues: For building concrete bridge over Ocmulgee River, \$150,000; build or extend system of surface or storm sewers and sanitary sewers, \$225,000; pave streets and repair existing pavements, \$100,000; build new fire engine house and purchase and repair fire equipment, \$25,000, and to build a municipal athletic stadium, \$100,000.

### Hardee County, Florida, Sells \$850,000 Road Bonds.

In a telegram to the MANUFACTURERS RECORD, S. W. Conroy, clerk to the board of commissioners of Hardee County, Wauchula, Fla., advises that successful bidders for the purchase of \$850,000 of road bonds, were: Breed, Elliott & Harrison and J. C. Mayer & Co., both of Cincinnati, and Blanchet, Thornburgh & Vandersall, Toledo, Ohio. The bonds were sold at a premium and accrued interest.

### \$650,000 Bond Issue Approved—Rogers County, Oklahoma, to Build 100 Miles of Roads.

Claremore, Okla.—A bond issue of \$650,000 for the construction of 100 miles of roads in Rogers County, has been approved by the office of the attorney general of the state. Proposed highways include one from Tulsa County north through this city to the Craig County line near Catale; west from Claremore to the Tulsa County line near Collinsville; east to the Mayes County line on the Pryor road and south from Claremore through Tiawa and Choteau to the Wagoner County line, and one extending north to the Nowata County line.

It is understood that federal aid funds to the amount of \$300,000 have been promised and this money will be used for building a road from the Tulsa County line near Catoosa northeast across Rogers County to the Craig County line.

### Kanawha County Awards Road Contract—Will Have \$1,000,000 for Work This Year.

Charleston, W. Va., February 9—[Special.]—Kanawha county court has awarded contract for grading and draining 7.02 miles of road on Lens Creek to L. J. Chandler, Virgilina, Va. at \$84,761.

Money available for permanent roads in Kanawha county this year, amounts to nearly \$500,000, which will be supplemented by about the same amount from state and federal funds.

The principal construction work will be in Union district, where proceeds of a \$220,000 bond issue, will be available. Construction provided for in two districts will approximate 30 miles, including several bridges.

### Florida State Highway Department Asks Bridge Bids.

Tallahassee, Fla.—Proposals will be received by the State Road Department at its office here until February 26, for the construction of a bridge in St. Lucie County, consisting of three 24-foot reinforced concrete spans. Bids will also be received for a bridge in Brevard County which will consist of one 24-foot and one 20-foot reinforced concrete span or two 14-foot treated timber spans, and for another bridge in St. Lucie County to consist of two 24-foot reinforced concrete spans or three 15-foot treated timber spans.

### Bids Wanted for Building 7.43 Miles.

Wichita Falls, Tex.—Bids will be received by the commissioners court of Wichita County at its office here until March 10, for the construction of 7.43 miles of concrete on the Seymour road designated as highway No. 30. Detailed plans and specifications may be seen at the office of J. M. Isbell, county engineer, Wichita Falls, and at the State Highway Department, Austin.

### Rutherford County, Tennessee, to Expend \$750,000.

Murfreesboro, Tenn.—An issue of \$300,000 of bonds for the construction of federal aid roads to the Bedford, Cannon and Coffee County lines, has been voted by the Rutherford County Court at a recent session here. In addition \$450,000 of bonds were voted for rebuilding all county-owned turnpikes.

### Louisiana Asks Bids on Eleven Miles.

Many, La.—Bids will be received by the Louisiana Highway Commission, Baton Rouge, until March 6 for building 11.336 miles of gravel road in Sabine Parish connecting Many with the Jefferson highway at Belmont. The Jefferson highway through Belmont is now being graveled.



### Bids Wanted on Roads in West Virginia.

Buckhannon, W. Va., February 16—[Special.]—Proposals will be received jointly by the State Road Commission of West Virginia and the Upshur County Court at Buckhannon, W. Va., until March 10, for the construction of 5.89 miles of road, including grading, draining and paving with bituminous macadam. Standard forms, plans, specifications and estimates of quantities may be obtained from the division engineer at Morgantown, from the State Road Commission at Charleston, or the county road engineer at Buckhannon.

### Coal Company to Build 10 Miles of Road.

Logan, W. Va.—Bids will be opened by the Island Creek Coal Co., Huntington, W. Va., on March 1, for the construction of ten miles of one-course concrete paving in Logan district of Logan County. This work will cost about \$250,000 and will be in charge of A. R. Beisel, general manager of the Island Creek Coal Co. J. W. Smith of Logan is the county engineer.

### Notes on Good Roads Construction.

Glades County Commissioners, Moore Haven, Fla., have called an election for the first week in March on a bond issue of \$275,000 for the construction of roads.

The State Highway Department, Montgomery, Ala., will receive bids until March 3 to build 5.399 miles of federal aid road in Lawrence County. Work will consist of grading, surfacing and building 8 structures.

H. L. Washburn, auditor of Harris County, Houston, Tex., will receive bids until February 25 for grading the Genoa-Mykawa road, graveling Colliers Corner-South Houston road and resurfacing and repairing the Westheimer road. Specifications are on file at the office of the county engineer at Houston.

### Mill and Village Estimated to Cost \$500,000.

Hemp, N. C.—As reported in the MANUFACTURERS RECORD last week, the Charlotte office of Lockwood, Greene & Co. of Boston and Atlanta, has been engaged for the engineering work on the cotton mill to be erected here by the County Moore Mills, Inc., at an estimated cost of \$500,000, including the mill village. The main building will be of brick construction with steel sash, 650 by 180 feet, and will be equipped with 250 looms, all machinery to be electrically driven.

W. W. Cowgill of Pinehurst, N. C., is president and treasurer of the County Moore Mills, Inc., which are capitalized at \$300,000.

## TEXTILE

### Mills Installing 36 Additional Looms.

Post, Tex., February 16—[Special.]—The Postex Cotton Mills, here, Herbert Jones, agent, are installing thirty-six additional automatic wide Stafford looms. The company has an authorized capital stock of \$857,000 and is operating at present 10,000 spindles and about 300 broad looms, bleaching and finishing equipment. It produces wide sheeting, sheets and pillow cases.

### Texas Gingham Mill Now Operating.

New Braunfels, Tex., February 16—[Special.]—The Planters and Merchants Mills, Inc. began operating in the fall of last year and is now producing gingham with 225 persons engaged. By the end of this year it is planned to have the mill operating at capacity.

The mills here were organized in August, 1921 by Major S. M. Ransopher, formerly director of Trade and Industrial Education at the University of Texas. J. D. Gilliland, auditor of the Beaumont Shipbuilding Co. was made secretary and Max W. Schulz, formerly cashier of the Lockhart State Bank was elected as treasurer.

Power is obtained from a hydro-electric plant on the Guadalupe river, which was completed in 1922. The plant building is 120 by 310 feet, of reinforced concrete, and two stories high. It contains 10,000 spindles and 360 looms, and if operated at capacity with two shifts daily should produce about 9,000,000 yards of gingham annually.

The following firms furnished material and equipment and were engaged in the construction of the mill:

Lockwood, Greene & Co., engineers, Boston; Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa. generators and motors; James Leffel & Co., Springfield, Ohio, turbines; Saco-Lowell Shops, Boston, opening, picking, carding, drawing slubbers, intermediates, speeders, warpers and slasher machinery; Whitin Machine Works, Whitinsville, Mass., spinning frames; Crompton & Knowles Loom Works, Worcester, Mass., looms; Textile Finishing Machinery Co., Providence, R. I., finishing room machinery; Otis Elevator Company, New York, elevators; Barrett Company, New York, roofing; R. D. Cole Mfg. Co., Newnan, Ga., steel water tank and tower; Detroit Steel Products Co., Detroit, Mich., steel sash and glazing; Alamo Iron Works, San Antonio, Tex., reinforcing steel and shafting; San Antonio Machine & Supply Co., San Antonio, pipe material; Texas Belting Company, belting.



MILL AND POWER PLANT OF PLANTERS AND MERCHANTS MILLS, NEW BRAUNFELS, TEX.



# LUMBER AND BUILDING MATERIALS

## No Marked Change in Lumber Situation.

Washington, February 14.—As reflected by reports of about 400 of the larger lumber mills of the country received today, says the National Lumber Manufacturers Association, the lumber movement of last week was approximately on a level with that of the preceding week. With six more mills in the comparable report group than the week before, there was a slight increase in new business, shipments and production. Fifteen more mills than for the same week of 1923 show productions and shipments more and new business less.

Of the 381 reporting mills 358 have a total normal weekly production of 226,310,405 feet, according to which actual production was 98 per cent; shipments 102 and orders 98 per cent or normal production.

The unfilled orders of 269 Southern Pine and West Coast mills were 14,049,344 feet, as against 823,429,168 for 270 mills a week earlier. The Southern Pine mills by themselves, 138 in each week had unfilled orders of 344,438,709 for last week, and 350,574,330 for the preceding week. The 131 West Coast mills reporting for last week had unfilled orders of 469,610,635, as against 132 mills and 472,854,838 feet for the week ending February 2.

The following table compares the national lumber movement (reporting mills of 7 associations) for the three weeks indicated:

	Last Week	Corresponding Week 1923	Preceding Week 1924 (Revised)
Mills .....	381	366	375
Production .....	232,300,282	199,097,140	225,832,195
Shipments .....	244,382,871	238,777,961	242,869,995
Orders .....	235,508,679	265,130,990	234,245,675

All the reporting mills taken together show shipments 105 per cent and orders 101 per cent of actual production last week. For the Southern Pine mills by themselves these percentages are 109 and 101 respectively, and for the West Coast mills 94 and 92.

The following figures compare the lumber movement for the first six weeks of 1923 with the same period of 1924:

	Production	Shipments	Orders
1924 .....	1,250,311,763	1,345,117,290	1,452,945,764
1923 .....	1,160,114,319	1,429,650,447	1,620,039,431
1924 Increase .....	90,197,444		
1924 Decrease .....		84,533,157	167,093,667

## LUMBER MOVEMENT FOR SIX WEEKS, AND FOR WEEK ENDING FEBRUARY 9.

	Production		Shipments		Orders	
	1924	1923	1924	1923	1924	1923
Southern Pine Association:						
Total .....	425,899,495	418,049,746	479,967,489	493,014,868	497,642,688	591,611,835
Week (138 mills) .....	76,688,566	66,166,617	83,709,030	67,788,382	77,573,409	90,981,593
West Coast Lumbermen's Ass'n.:						
Total .....	571,125,986	513,782,730	569,449,430	622,999,739	592,128,776	678,845,559
Week (131 mills) .....	109,858,886	95,046,965	103,530,602	121,002,987	101,448,570	114,239,497
Western Pine Mfrs. Ass'n.:						
Total .....	93,891,000	71,909,000	140,606,000	144,205,000	169,725,000	149,450,000
Week (40 mills) .....	18,675,000	12,620,000	29,671,000	25,221,000	27,050,000	26,825,000
Calif. Redwood Ass'n.:						
Total .....	47,034,000	40,779,000	42,610,000	48,605,000	46,052,000	77,508,000
Week (15 mills) .....	8,223,000	8,531,000	6,640,000	7,894,000	8,093,000	14,383,000
North Carolina Pine Ass'n.:						
Total .....	37,251,182	42,381,643	39,304,171	47,078,940	52,275,300	50,897,037
Week (34 mills) .....	8,206,530	5,256,558	8,199,739	5,211,192	7,858,700	5,230,900
Northern Hemlock & Hardwood:						
(Softwood) Total .....	11,683,000	12,578,000	11,291,000	10,612,000	14,063,000	13,317,000
Week (13 mills) .....	846,000	1,692,000	1,655,000	1,380,000	1,481,000	1,770,000
Northern Pine Mfrs. Ass'n.:						
Total .....	38,454,100	43,810,200	45,914,200	48,057,900	58,104,000	44,353,000
Week (10 mills) .....	6,295,300	6,964,000	9,129,500	7,897,400	9,472,000	10,455,000
General Total for 6 weeks:						
(Softwood) .....	1,225,338,763	1,143,290,319	1,329,142,290	1,414,573,447	1,429,990,764	1,605,982,431
Northern Hemlock & Hardwood:						
Hardwoods (6 weeks) .....	24,973,000	16,824,000	15,975,000	15,077,000	22,955,000	14,057,000
Calif. White & Sugar Pine Mfrs.:						
(6 weeks) .....	31,786,000	.	75,546,000	.....	.....	.....
General total for week .....	232,300,282	199,097,140	244,382,871	238,777,961	235,508,679	265,130,990
Calif. White & Sugar Pine reports not included in totals, because "orders" not reported.						

Because of the incomparability of its weekly orders (new business) reports neither of the above tables includes mills of the California White & Sugar Pine Association, of which 11 reported for last week with a cut of 5,663,000 (which was 32 per cent of the total cut in the California pine region); shipments, 8,132,000 and orders 8,724,000 feet.

The Southern Pine Association reports from New Orleans that its unfilled order file is larger than at any time in the last four months, except for two weeks in January.

The West Coast Lumbermen's Association wires from Seattle that 131 mills manufactured 109,858,886 feet of lumber for the week ending February 9; sold 101,448,570 and shipped 103,530,602. Production for the reporting mills was 23 per cent above normal; new business was 8 per cent below production and shipments were 2 per cent above new business.

## \$3,000,000 Lumber Company Applies for Charter—Will Develop Hardwood Timber Lands in Santo Domingo.

Tampa, Fla.—Application has been made for a charter of incorporation for the Florida-West Indies Corporation with an authorized capital stock of \$3,000,000, general offices to be maintained in this city. Officers will include Charles D. Haines, chairman of the board; W. F. Miller, president; James H. Thompson, vice-president, and George N. Smith, secretary and treasurer, all of Tampa.

The purpose of the new corporation is to develop 360,000 acres of hardwood timber lands in Santo Domingo recently purchased from Mr. Haines by the Florida Realty and Mortgage Company, of which Mr. Miller is president. Sawmills are to be established on the property and the product shipped to Tampa for manufacture into high grade furniture which is expected to find a market in all parts of the world.

The Company plans to establish its own furniture factories in Tampa and assist other companies to locate plants here, making Tampa one of the leading hardwood and furniture manufacturing cities of the country. Water transportation facilities of the city offer many advantages, it is said, to carry out these plans.

### Weekly Report on Southern Pine.

The Southern Pine Association for the week ended February 8 reports as follows on 138 mills:

	Cars	Feet
Orders on hand beginning of week.....	15,370	350,574,330
Orders received during week.....	3,401	77,573,409
Total .....	18,771	428,147,739
Shipments during week .....	3,670	83,709,030
Orders on hand end of week.....	15,101	344,438,709

Production for the week was 76,688,566 feet. Shipments were 7,020,464 feet above production or 9.15 per cent. Orders were 884,843 feet or 1.15 per cent above production. Orders were 6,135,621 feet below shipments or 7.33 per cent. The week was 12.45 per cent or 10,906,839 feet below normal production. The decrease in orders on hand amounted to 6,135,621 feet or 1.75 per cent.

### Heavier Shipments of North Carolina Pine.

The North Carolina Pine Association reports as follows on 40 mills for the week ending February 9:

	Total Feet
Orders .....	8,398,700
Shipments .....	7,894,917
Production .....	6,677,240
Normal Production .....	11,478,000

The orders were 6 per cent above shipments, 20 per cent above actual production and 27 per cent below normal production. Shipments were 15 per cent below actual production and 31 per cent below normal production. Actual production was 41 per cent below normal. The week shows an increase in orders of 1,285,100 feet or 18 per cent.

### Commendations, Kicks and Comments

#### More News of the South Than All Others.

MRS. HENRY CROSLAND, Bennettsville, S. C.—In renewing my subscription to the MANUFACTURERS RECORD, I cannot refrain from writing you that we find it the most valuable by far of all the papers and magazines we read.

In my newspaper work the RECORD gives me more information about Southern conditions and possibilities than all other publications combined.

#### Will Other Friends Pass the Word on to Others?

A. C. HOFFMAN, Asheville, N. C. of The Trenton Potteries Co.—It is a pleasure to advise you that the company has gladly renewed my subscription for two years.

Personally, I feel that I couldn't get along without it. In fact, it's my "Bible" in business and in care-free moments offers highly interesting and instructive reading.

How can any habitual reader fail to recommend the MANUFACTURERS RECORD to friends? More power to you!

#### We Hope So Too.

C. F. Smith of Jacksonville, Fla. in a recent letter enclosing one written by an old Confederate soldier in 1865 to his wife in South Carolina committing her and the children to the care of God during the time of stress and danger on the battlefield, showing the spirit of many of the people of that day, sends the very best wishes for this paper and its work and says:

"I want to express my appreciation of the wonderful good your weekly publication is doing wherever read by right thinking people. May 1924 bring you greater opportunities, not only through a wider circulation, but through more loyal support of the principles for which the MANUFACTURERS RECORD stands."

#### We Are Trying to Be Longsighted as to Ford's Proposition, But We Can Appreciate Sheffield's Position in the Matter.

CHAS. SUMNER, Sumner Realty Company, Sheffield, Ala.—Your letter received, also the 500 copies of "Facts About the South." We thank you very much for sending these and believe they will be a great help in convincing Northern and Eastern people of the wonderful possibilities the South offers in all lines of endeavor.

We appreciate your paper very much, but do not understand why you should be so short-sighted as to fail to appreciate the Ford offer, and we hope that you will see the light and get on the right side of the question in the near future.

## MECHANICAL

### An Improved Truck Loader.

The truck loader equipped with a Fordson power plant as shown in the illustration herewith is known as the "Highway" model and it has been developed by the George Haiss Manufacturing Co., of New York City; it is equipped with the creeper type of traction and is described as an efficient and up-to-date machine, having greater capacity and usefulness for heavier work than could be done with loaders previously equipped with this power method. In this new loader the Fordson is stripped of its wheels and is mounted in the loader chassis, providing the power plant and transmission for the machine. The loader frame is mounted on Haiss improved creeper elements by a three point suspension, the treads being ten inches wide and five feet long between centers, or seven feet long over all.

A positive crowding speed of two and one-half feet per minute is obtained as on the larger loaders of this make, so that this model can move into the material slowly while



TRUCK LOADER IN OPERATION.

loading. The patented feeding propellers are provided for cleaning up a path for the loader, and the elevator buckets, which are eight inches by sixteen inches in size, with teeth, are mounted on two strands of combination chain. The capacity of the loader is from one to one and a half cubic yards per minute. The controls are all placed at the operator's platform on the left side of the machine and the traveling speeds are respectively, 40 feet, 70 feet and 180 feet per minute forward and 70 feet and 2½ feet per minute reverse.

Briefly, this is a small Haiss creeper loader with a Fordson power plant and it has been developed to meet a demand for a medium priced creeper loader of sufficient capacity for road building contractors. It can be equipped with straight chute, swivel spout or measuring hopper. One of the machines was exhibited at the recent road show in Chicago.

The loader in the picture is shown as it appeared while working in the yard of Wm. B. Schneider, Inc., of New York City, where it loaded five cubic yards of gravel in three and a half minutes.



# Construction Department

## EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained. Further facts about any incomplete or incorrect item reported in these columns are always appreciated.

## DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers, and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$20.00 a year.

### Bridges, Culverts and Viaducts

Fla., Lake Worth—Details under Miscellaneous Construction.

Ga., Columbus—City and Central of Georgia Ry., Capt. C. K. Lawrence, Ch. Engr., plan receiving bids until early in March to build 13th St. viaduct; Walter A. Richards, City Mgr.

Ga., Columbus—Muscogee County Commissioners, let contract to Columbus Construction Co., at \$27,300 for bridge over Upatoi Creek on Buena Vista road.

Ky., Danville—Kentucky Hydro-Electric Co., Louisville, Ky., is expending \$90,000 to build bridge across Dan River in Boyle County.

Ky., Harrodsburg—Kentucky Hydro-Electric Co., Louisville, Ky., plans building bridge across Dan River in Mercer County; approximate cost \$100,000.

La., Baton Rouge—City received low bids for 3 concrete culverts for Goose Hollow, St. Phillip St. and Roseland Terrace canals, as follows: R. J. Estep & Co., Dallas, at \$65,523.80, for Goose Hollow; C. B. Stewart, Baton Rouge, La., at \$14,200.25 for Roseland Terrace; C. B. Stewart, at \$41,064.38, for St. Phillip St.

Miami—Dade County Commrs., let contract to Luten Bridge Co., York, Pa., at \$61,648, to build concrete bridge across Baker's Haul-over channel, between Biscayne Bay and Atlantic Ocean.

Md., Towson — Details under Road and Street Construction.

Miss., Hazelhurst—Copiah County Commrs., Dist. No. 3 will receive bids until March 3 to repair bridge over Homochitto River.

Tenn., Sparta—Details under Road and Street Construction.

Tennessee—State Highway Dept., Nashville, let contract for 25 bridges as follows: Federal Aid Project No. 41, Sec. C, Knox County, reinforced concrete overhead grade separation structure over Southern Ry., between Knoxville and Loudon County line, to Emory Construction Co., Knoxville, at \$18,150.76; Nos. 95 and 97, Sullivan County, 2 bridges on road between Blountville and Kingsport, to Dickson Contracting Co., Savannah, Ga.; No. 100, Haywood County, 14 bridges on road between Brownsville and Tipton County line, to Parham Construction Co., East St. Louis, Ill., at \$233,891.50; No. 130, Cumberland County, 3 bridges on road between Crossville and White County line, to A. M. Cook, Oneida, Tenn.,

State Aid Project 135, Jackson County, over Roaring River, 114-ft. steel span, and 18 wooden spans, to General Construction Co., St. Louis, Mo., at \$44,734.23; No. 150, Coffee County, 2 reinforced concrete bridges on road between Manchester and Hillsboro, to Citizens Engineering & Construction Co., Savannah, Ga.; No. 151, Coffee County, reinforced concrete bridge, of two 30-ft. spans, over McBride's Branch, on road between Manchester and Murfreesboro, to J. B. Ramsey, Lawrence-

burg, Tenn., at \$6060.10; 152, Anderson County, reconstruct steel bridge over Clinch River at Clinton; one 220-ft. and two 144-ft. spans, to Vincennes Bridge Co., Vincennes, Ind., at \$9507.89.

S. C., Charleston—Charleston County Sanitary & Drainage Comn., 39 Broad St., will receive bids until March 20 to construct 166-ft. double leaf Strauss bascule span superstructure of bridge over Ashley River on State Highway No. 6; bridge to have 34-ft. roadway, and two 4½-ft. sidewalks; 756,800 lbs. structural steel; 144,800 lbs. machinery and castings; 480 cu. yd. counterweight concrete; Federal Aid Project 215; plans, etc., on file, and from State Highway Engr., Columbia, S. C.

Tex., Canadian—Santa Fe Ry. System, A. R. Mitchell, Chicago, Ill., and M. C. Blanchard, Amarillo, Tex., Engrs., considering plans for bridge over Canadian River; 16 new spans, each 115 ft. long; estimated cost \$1,000,000.

Tex., Colorado — Mitchell County plans surfacing with 2-in. Warrenite paving 2 bridges as follows: Wolf Creek and Colorado River; also pave short section of State Highway No. 1, with 2-in., Warrenite pavement on 5-in. concrete base; total length 1500 ft.; estimated cost approximately \$10,450; Frank F. Du Bose, County Engr.; J. C. Hall, County Engr.

Tex., Houston—Details under Road and Street Construction.

W. Va., Huntington—City and Chesapeake & Ohio Ry. Co., C. W. Johns, Ch. Engr., Richmond, Va., plans building undergrade crossing at W. 14th St.; estimated cost \$67,000. Address The Mayor.

### Canning and Packing Plants

Ga., Brunswick—E. C. McLean of Palmetto, Fla., will erect packing house on St. Simon Island.

Mo., Ave—Roy Nelson of Roy Nelson Canning Co., will erect peeling department at plant and install boiler and engine. (Later noted.)

N. C., New Bern—J. W. Derrickson and J. V. Blade will erect canning plant.

### Clayworking Plants

Tex., Dallas—Reliance Brick Co., capital \$50,000, incorporated by F. C. LeFountain, R. E. Cope and others.

### Coal Mines and Coke Ovens

Okl., Stigler—Acme Coal & Coke Co., reported as having plans to build additional 5 mi. railway track from present pit to new operations.

W. Va., Caloric—Smith Pocahontas Coal Co., James Gorman, Pres., Lynchburg, Va., W. E. Griffith, Gen. Mgr. and Supt., Caloric, W. Va.; plans increasing tonnage and capacity of mines during the current year.

West Virginia—Hunter Crucible Steel Co.

of Cleveland, Ohio, reported to have purchased the Excello mine of the Hesper Coal & Coke Co. and the mine of the Philmont Coal Co. and 2700 acres of undeveloped coal of the Kanawha series in Nicholas and Webster Counties belonging to the Standard Coal Co., of Clarksburg; total number of acres 4064; plans extensive improvements and development of properties.

### Concrete and Cement Plants

Ala., Birmingham—Lehigh Portland Cement Co., Young Bldg., Allentown, Pa., are doing some additional construction work by own forces; consisting of installation of new kiln in addition to the three in operation, also corresponding expansion of other departments of plant, increasing capacity more than one third, giving total annual capacity of more than 1,500,000 bbls.

### Cotton Compress and Gins

Miss., Monticello—Monticello Gin Co., incorporated by J. D. Gillespy and others.

Tex., East Barnard—Farmers Gin Co., capital \$25,000, incorporated by W. C. Buls, Clem Boettcher and others.

Tex., Moody—Dr. J. B. Young and D. J. Norris will erect electrically equipped cotton gin.

Tex., Robstown—W. A. Koonce & Co., Inc., capital \$40,000, incorporated by William Bauer, Jr., W. A. Koonce and others.

Tex., St. Hedwig—St. Hedwig Farmers Gin Co., capital \$12,000, incorporated by T. A. Lubinski, Ed. Krolbasse and others.

Tex., San Juan—Aransas Company of Corpus Christi, Tex., will erect cotton compress with capacity of from 1000 to 1200 bales daily; construction to begin March 1.

### Drainage and Irrigation

Arkansas — McKinnney Bayou District Commrs., Miller County, let contract to Fred M. Crane of Omaha, Neb., to construct 9 mi. levees and 47 mi. of ditches; the levees to protect land from Red River back water and overflow from adjacent hills, the ditch system will provide interior drainage; total amount of embankment and excavation required is 2,225,000 cu. yds.; has \$450,000 available; district embraces 32,000 acres of alluvial lands in valley of Red River; construction work has begun under supervision of the Morgan Engineering Co., Engrs., 620 Goodwyn Institute Bldg., Memphis, Tenn. (Supersedes recent item.)

Miss., Yazoo City—Elliot-Harman Engineering Co., Engrs., Memphis, Tenn., have completed preliminary survey for the proposed Yazoo River Drainage Dist., to reclaim probably 250,000 acres of land.

Missouri—Commrs. of the Little River Drainage Dist. of Missouri, have plans and surveys are now under way for the additions, enlargements and extensions to vast drainage system; work to be started in the early summer and will require between two and three years to complete contracts; new plan calls



for construction of 125 mi. of new ditches and improvement of 175 mi. of old channels, containing about 25,000,000 cu. yds. earth removal; also to construct two storage basins or reservoirs, and floodways between levees to handle heavy flows; district embraces six counties, Bollinger, Cape Girardeau, Scott, New Madrid, Stoddard, Dunkin and Pemiscot; plans for the reservoirs will be the Caney Creek Basin in Scott County covering four square mi. or about 2500 acres land, the second reservoir known as Jenkins Basin in Stoddard County will be constructed by a dam across a natural valley; the whole enlargement of the drainage system, in district will be carried into Big Lake in northeast Arkansas at the state line; Morgan Engineering Co., of Memphis, Tenn., Engrs. in charge.

N. C., Lorange—Commrs. of Wayne County Drainage Dist. No. 1, H. F. Hardy, Chmn., receives bids until March 1 for construction of drainage improvements: work consists of cleaning out and cutting approximately 15 miles of dredge ditches containing about 200,000 cu. yds.; work suitable for drag line or floating dredge; Will D. Alexander, Engr., Charlotte, N. C.

Texas—W. W. Williams, of Stanton, Tex., interested in establishing irrigation system in West Texas; plans installing 5-in. cylindrical pump to lift water from below the surface of the ground.

### Electric Light and Power Plants

Ala., Mobile—City Commn., Harry T. Hartwell, Chmn., will install ornamental street lighting system.

Alabama—Southern Cities Power Co., Chattanooga, Tenn., has leased electric light and power utilities properties at Stevenson, Bridgeport, and Scottsboro.

Ark., Ashdown—W. L. Moody of Little Rock, Ark., has acquired local ice and light plant.

Fla., Miami Beach—A. E. Fitkin Co., 165 Broadway, New York, reported to be negotiating for purchase of public utilities, including electric light and power plants and Miami Beach Electric Street Ry. system.

Fla., Miami—Details under Land Developments.

Fla., Miami—Miami Electric Light & Power Co., H. H. Hyman, Gen. Mgr., will extend electric service lines.

Fla., St. Petersburg—City Comsn. receives bids until March 3 to install white way system on W. Central Ave.

Ky., Danville—Kentucky Hydro-Electric

Co. is constructing municipal water power plant at cost of about \$200,000.

La., Lake Charles—Lake Charles Railway, Light and Water Co., reported to have entered into contract with Stone & Webster Engineering Corp., 147 Milk St., Boston, Mass. to sell gas plant, waterworks, street railway and light and power system.

Mo., Independence—Jackson County Light, Heat & Power Co., D. S. Milne, Supt., reported to make extension of mains; estimated cost \$75,000.

Mo., Kansas City—Kansas City Power & Light Co., 1330 Grand Ave., will erect during 1924 one new automatic sub-station and an addition to hand operated sub-station and then change entire station to automatic operation; plans and specifications complete; invite bids.

Mo., St. Louis—Louis 4, Egan, Pres. of Union Electric Light & Power Co., reported to plan expending a huge sum during next 6 years in improvements.

Okla., McAlester—Albert Emanuel Co., Inc., 61 Broadway, New York City has acquired Pittsburgh County Railway & Choctaw Power & Lighting Co. of McAlester; company will be consolidated with the Coal District Power Co., Hunting, Ark.

Tenn., Chattanooga—White Way Committee, S. H. Borisky, Chmn., receives bids until March 5 to construct and install white way on Main St.

Tenn., Erin—Erin Utilities Co., lately noted receiving 99 franchise to erect and operate transmission line to Cumberland City, will construct line of 4400 volts, develop 50 h.p.; Leon F. Stone, Engr. (See Machinery Wanted—Engines (Crude Oil); Hardware; Copper Wire; Transformers.)

Tenn., Lawrenceburg—Details under Water Works.

Tex., Austin—State Board of Water Engrs. announced that all water power rights on Guadalupe River from Kendall through Gonzales counties have been taken over on options by C. W. Besancor and F. H. Wilmont of New Orleans, La.; project includes development of 13 dams and from 75,000 to 100,000 h.p.

Tex., Collinsville—City will probably vote on \$10,000 bonds for installing electric light plant. Address The Mayor.

Tex., Fort Worth—City will install white way system in Cheltenham addition; is receiving bids on 42 metal standards and 10,000 ft. of underground cable.

Tex., Lubbock—Lubbock Power Co. let contract to J. W. Neves, Lubbock, to construct brick addition to power plant. (Lately noted.)

Va., Danville—City, Frank Talbot Supt. of Public Utilities, let the contracts for following equipment: to Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., at \$42,250 for alternator and generator; to General Electric Co., Schenectady, N. Y., for synchronous motor; to Allis Chalmers Manufacturing Co., Milwaukee, Wis., for switchboard and instruments; C. H. Wheeler Manufacturing Co., Phila., Pa., at \$14,750 for condenser; contract for piping not let. (Lately noted.)

Va., Norfolk—Virginia Railway & Power Co., T. Norman Jones, Mgr. of Norfolk Div., let contract to Westinghouse Electric & Mfg. Co., Philadelphia, Pa., for 4 Westinghouse new model multiple retort underfeed stokers; to Babcock & Wilcox Co., 85 Liberty St., New York City, for four 512 h.p. boilers to be installed in extension to Reeves Ave. power station; also let contract for electrical auxiliaries for 12th St. power house. (Lately noted.)

### Flour, Feed and Meal Mills

Tex., Fort Worth—See Miscellaneous Construction.

Tex., Houston—American Maid Flour Mills increased capital from \$600,000 to \$1,500,000.

W. Va., Charleston—Charleston Milling & Produce Co. increased capital from \$300,000 to \$450,000.

### Foundry and Machine Plants

Ala., Anniston—Anniston Foundry Co., Wm H. Deyo, Sec.-Mgr., Box 78 let contract to Ogletree Construction Co., to erect one 60x40-ft., one 90x30-ft. and one 280x25-ft. buildings; ordinary construction, estimated cost \$20,000; will install planers, lathes, shapers, drill press, tapping machines, all ordered; daily output cast iron soil pipe and fittings. (Lately noted burned at loss of \$25,000.)

Md., Baltimore—The Kofor Co., Inc., 704 Union Trust Bldg., chartered by Samuel J. Fisher, Allen H. Fisher and others.

Miss., Laurel—Bartran Iron Works, capital \$10,000, incorporated by D. W. Bartran and others.

Mo., Joplin—The Shafer-Leverett Boiler & Machinery Co., John L. Shafer, Pres.; Virgil A. Leverett, Sec.; has acquired site at Fifth St. and Cox Ave., 150x230 ft.; has taken over the Gus James Boiler Works; will erect new plant of concrete block construction, installing machinery, etc.

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MANUFACTURERS RECORD

BALTIMORE, MD.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned

Mo., Kansas City—California Pipe Line Machine Co., J. J. Mahoney, Pres.-Mgr., will erect 100x132 ft. building, opens bids May 1; to manufacture pipe line machines for construction of oil pipe lines; Geo. W. Swehla, Archt. (Lately noted.)

Tenn., Knoxville—W. M. Fulton Manufacturing Co. let contract to J. M. Dunn & Co. to erect addition to plant, concrete and steel construction, fireproof; estimated cost \$40,000; have begun work.

### Gas and Oil Enterprises

Ark., Paragould—City, Mayor McPherson, contemplates installation of artificial gas plant.

Fla., Clearwater—City will vote March 11 on \$150,000 bonds for municipal gas plant. Address The Mayor. (Lately noted.)

La., Shreveport—J. H. Williams Drilling Co., capital \$50,000, incorporated with E. J. Deas, Pres.; J. H. Williams, Sec.-Treas.

La., Shreveport—The Hunt-Smith Oil Corp., capital \$250,000, incorporated by W. S. Smith, W. T. Hunt and others.

Mo., Kansas City—Interstate Refineries, Inc., leased 27½ acre tract adjoining present refinery.

Okl., Oklahoma City—Vee Oil Co., capital \$60,000, incorporated by V. K. Sparks, Oklahoma City; H. H. Sparks of Newark, Ohio and others.

Okl., Tulsa — Lauman Petroleum Co., capital \$100,000, incorporated by T. B. Lauman, C. F. Sinks and others.

Okl., Tulsa—Skeeter Oil & Gas Co., capital \$50,000, incorporated by Victor M. Wagner, of Enid; Edgar Cohn of Garber, Okla. and others.

Okl., Tulsa—Solow Petroleum Co., capital \$10,000, incorporated by E. M. Solow, W. L. Kimmell and others.

Tenn., Chattanooga—Edw. Fowler and J. V. Lewis of T. L. Cutt Co. are organizers of reclaiming plant for waste crank case oil from autos; J. V. Lewis will be general manager, and T. E. Lewis, plant manager; have exclusively territory to operate under patents. (Lately noted.)

Tex., Amarillo—American Refining Co. of Wichita Falls, Tex., has leased 800 acres of oil lands in North Carson county.

Tex., Austin—Asiatic Petroleum Co., increased capital to \$50,000.

Tex., Dallas — Details under Land Developments.

Tex., Fort Worth—Radio Petroleum Co., capital \$25,000, incorporated by L. A. Greene, J. K. Helmar and others.

Tex., Panhandle—Pauline Oil & Gas Co. of Oklahoma City, Okla., will construct pipe line and oil refinery, pipe line will be capable of transporting more than 5000 bbls. of crude oil daily from producing wells in north Carson and south Hutchinson counties.

Tex., San Antonio—Calliham Oil Co., capital \$20,000, incorporated by W. W. McCrory, R. C. Napier and others.

Tex., Sherwood—Texas Pacific Coal & Oil Co. has leased 3200 acres oil and gas land in eastern Orton County.

Tex., Taylor—Henze-Triedel Oil & Gas Co., incorporated by Wm. Henze, Sr., Herman Friedel and others.

Tex., Texas City—Vacuum Oil Co. let contract for erection of 80,000 bbl. steel storage tank.

### Ice and Cold-Storage Plants

Ala., Birmingham—Standard Ice Co., capital \$60,000, incorporated by A. Sherrod, E. L. Candler and others.

Fla., Madison—Town, S. P. Griffin, Clk. will receive bids for the installation of ice plant in connection with their power plant; H. D. Oxford, Chrmn. of Street Committee.

Miss., Marks—Marks Ice & Coal Co., capital \$10,000, incorporated by Y. C. Price, W. T. Cox and others, all of Batesville, Miss.

Tex., Brady—Mayhew Produce Co. has plans for construction of 15 ton capacity ice plant with cold storage rooms.

Tex., Burnet — R. E. Shelburn, Chrmn. of the Burnet County Farm Bureau, interested in the establishment of poultry association, with a cold storage and dressing plant.

### Iron and Steel Plants

Md., Curtis Bay, Baltimore—Curtis Bay Copper & Iron Works, will erect two steel tanks, 10x25-ft., at east end of Division St., east of Railroad Ave., estimated cost \$8500.

W. Va., Wheeling—J. E. Moss Iron Works has acquired the interests of the Riverside Bridge Co.; J. E. Moss will remain as President, F. G. Jolliffe, Sec.; J. G. Stromp, Asst. Gen. Mgr. and in charge of sales; will remodel the Riverside plant to produce a greater tonnage; plans also include enlarging of present office building at corner of 28th and Chapline Sts.; in addition to the fabricating of materials classed as structural steel, will also manufacture and install all types of miscellaneous and ornamental iron and bronze work, etc.; will increase capital to \$1,500,000.

### Land Development

Ala., Birmingham — May Realty Co., incorporated by G. P. Foster, J. E. Ferrell and others.

Ala., Birmingham — Realty Purchase Co., capital \$25,000, incorporated by D. T. Cross, F. H. Jones and others.

Ala., Birmingham — Brown & Hill Investment Co., incorporated by S. M. Hill, G. B. Brown and others.

Ala., Birmingham — Kirles Realty Co., capital \$13,000, incorporated by R. W. Kirkland, W. D. Lee and others.

Ala., Birmingham — Streit Realty Co., incorporated by B. H. Francis, Douglas Streit and others.

Ala., Birmingham — Jemison Investment Co., incorporated by Robert Jemison, Jr., J. M. Otts and others.

Ala., Birmingham — Leedy Investment Co., incorporated by W. B. Leedy, M. F. Smith and others.

Ala., Birmingham — Realty Co., Inc., capital \$28,000, incorporated by Phares Coleman, Frank E. Spain and others.

Ala., Birmingham — H. E. Dalhey Realty Trading & Investment Co., capital \$40,000, incorporated by H. E. Dalhey, Joe E. Robinson and others.

Ala., Birmingham — Realty Sales Co., capital \$10,000, incorporated by R. W. Brown, C. M. Nelson.

Ala., Ensley — Ensley Real Estate & Rental Co., incorporated by J. C. Almon, W. E. Daniel and others.

Fla., Fulford—Frank Brown, Propr. of Pershing Hotel, Miami, Fla., will develop 640 acres for orange grove.

Fla., Miami—Harry B. Graves, owner and developer of Sunny Isles has begun work on development of another unit for subdivision.

Fla., Miami—Florida Cities Finance Co., M. C. Tebbetts, Pres.-Mgr., will develop 575½ acres at Fulford By The Sea; will expend \$1,000,000 in improvements, including paved

streets, curbs, cement walks, electric lights, storm sewers, septic tanks; gravity system of water works, 10,000 gal. capacity concrete tank; rocked, oiled and sanded roads; erect 2 story fraternal hall and convention hall with seating capacity 3000; will open building proposals in 1925; C. E. Merritt, Constr. Engr., Fulford, Fla. (Lately noted.)

Fla., Milton—M. S. Felton, Green Bay, Wis., has acquired 3000 acres of land and will develop in satsumas, grapes, etc.

Fla., Oldsmar—Oldsmar Land Development Co., Harry E. Prettyman, Pres., will expend over three million dollars during 1924 in improvements to Oldsmar; will convert 40,000 acres of fertile soil in south Florida into truck and fruit farming district; plans include erection of \$1,000,000 hotel with bathing beach, 18-hole golf course, establishment of yacht club, etc.

Fla., West Palm Beach—Zook Properties, Inc., capital \$50,000, chartered with C. A. B. Zook, Pres., Delray, Fla.; Raymond Feoman, Sec., West Palm Beach, Fla.

Ga., Atlanta — Park Committee of City Council will develop six acre block on Kirkwood Rd., Phillips, Hardee and Norwood Sts., for Kirkwood Park.

Ga., Columbus—The Woodruff Co., capital \$100,000, incorporated by James W. and H. E. Woodruff and others.

Ky., Ashland—Salisbury Realty Co. increased capital from \$60,000 to \$125,000.

Md., Frederick—Frederick County Athletic Field Assn. interested in erection of park and stadium.

Mo., Kansas City—Granthurst Realty Co., capital \$50,000, incorporated by W. M. Henson, W. P. Hovey and others.

Mo., Kansas City—Schooley—Capen, Inc., capital \$50,000, incorporated by E. F. Schooley, L. J. Capen and others.

Md., Baltimore—Natmor Realty Corp., 2512 Brookfield Ave., incorporated by Nathan Sapperstein, Morris Shuger and others.

Md., Elkton—White Hall Farms, Inc., lately noted incorporated with \$100,000 capital, organized with T. W. Bacchus, Jr., Pres.; Elizabeth S. Bacchus, Jr., Sec.; establish dairy farm.

Md., Scotland—Bay Park Co., incorporated by Robert H. Given, Jr., William E. Wilson and others.

Miss., Eutaw — Townes Planting Co., capital \$25,000, incorporated by J. K. Townes and others.

Miss., Jackson — Capital Land & Investment Co., capital \$24,000, incorporated by Stokes V. Robertson, W. S. Gordon and others.

Miss., McHenry—Satsuma and Nursery Co., capital \$25,000, incorporated by E. E. Colmer of McHenry; W. C. Batson of Wiggins, and others.

Mo., St. Louis—Estelle Realty Co., incorporated by Ely E. Yawitz, 725 W. Gage Ave., I. E. Goldstein and others.

Mo., St. Louis—Fern Glen Realty Co., incorporated by H. B. Fitzwilliam, W. M. Kletcker and others.

Mo., St. Louis—Strodtman & Strodtman Real Estate Co., capital \$25,000, incorporated by G. W. Strodtman, C. J. Rode and others.

Mo., Webster Groves—Hallmar Investment Co., incorporated by M. E. Coggeshall, L. C. Martin and others.

N. C., Asheville—Ralph Arbogast, T. B. Summers and other have acquired 100 acres



on Beaucaether mountain and will develop for subdivision.

N. C., Asheville—City Commsn. is planning erection of power plant and large lake at Tourist Camp, to cost about \$75,000; tentative plans call for power plant with capacity of 300 h.p.; Frank L. Conder, Commr. of Public Works.

N. C., Charlotte—Parks Land Co., increased capital from \$50,000 to \$250,000.

N. C., Chimney Rock — Chimney Rock Mountains, Inc., Dr. Lucius B. Morse, Pres., is proceeding with plans for development of 6500 acres for construction of lake and all year resort; have completed plans for construction of dam to be built across Rocky Broad River, this will serve to impound water into Lake Lure and will supply power to a hydro electric plant with a peak load of capacity of 2000 h.p.; plans provide for installation of at least 10,000 incandescent lights together with searchlights to be placed upon high cliffs and mountain peaks; model town is also provided in program of construction; E. S. Draper, Landscape Archt. and Engrs., Charlotte, N. C., lately noted as making surveys and general plan for development.

N. C., Clemmons—Forest Hills Farm, capital \$150,000, incorporated by R. E. Lasater, S. M. Lybrook and others, all Winston-Salem, N. C.

N. C., Spencer—Headinger and Howard have acquired River Side Park, will improve and operate.

N. C., Wilmington—City contemplates developing auto tourists camp; plans provide for park and playground of approximately 1 acre at entrance to camp 20-ft. driveways will be made through grounds, build deep well, incinerator plant; site not selected; McKean Maffitt, City Engr.; R. C. Cantwell, Chrmn. of Camp Comm.

Okla., Bartlesville—City will expend \$25,000 in improvements to parks. Address The Mayor.

Okla., Duncan—City will develop 20 acre site for park and playgrounds. Address The Mayor.

S. C., Greenville — Park and Tree Commission. John A. McPherson, Chrmn., will establish city-wide park system; \$110,000 bonds available.

Tenn., Chattanooga—Col. Richard H. Kimball and Sam R. Read acquired 40 acre tract and will develop for subdivision; will install streets, boulevard; establish civic center consisting of moving picture theatre, drug stores, etc.; Harland Batholomew, City Planner, in charge of development work.

Tex., Dallas—Ballard, Burgher & Co. will develop Roselawn for subdivision; install streets and sidewalks, etc.

Tex., Dallas — North Texas Trust Co., Everett S. Owens, Pres., will expend about \$300,000 in improvements to 82 acre site for subdivision in North West Oak Cliff, will install water, sewer, lights, gas, curbs, cutters, sidewalks and paved streets and landscaping; Koch & Fowler, Landscape and Const. Engrs., Central State Bank Bldg., Dallas. (Lately noted.)

Tenn., Knoxville—Mountain View Development Co., capital \$25,000, incorporated by H. S. Hazen, John M. Allen, Jr. and others.

Tex., Lufkin — Martin Wagon Co., has acquired 53 acre tract and will develop for subdivision.

Tex., Port Arthur — Dr. W. B. Johnson acquired 1600 acres of land and will develop.

Tex., Port Arthur — Suburban Development Co., capital \$36,000, incorporated by G. W. Imhoff, M. J. Painton and others.

Tex., San Antonio — Woodlawn Hills Development Co., capital \$70,000, incorporated by Geo. Hagelstein, C. E. Tolhurst and others.

Va., Norfolk—T. S. Machen & Co., Inc., capital \$10,000, chartered with F. E. Machen, Pres.; T. S. Machen, Sec.

Va., Norfolk—T. J. East Development Co., capital \$50,000, incorporated with Thomas O'Farrell East, Pres.; T. J. East, Mgr. will develop 21 acres of land; install electric lights; city improved streets; will erect 18 family apartment, number of homes, etc.; Phillip B. Moser, Archt., Norfolk; Pierce & Co., Contrs., Norfolk. (Lately noted.)

Va., Richmond—Powhatan Realty Corp., capital \$20,000, incorporated with W. S. P. Mayo, Pres.; Geo. A. Tower, Sec.

Va., Roanoke — Stratford Realty Corp., capital \$15,000, chartered with Chas. E. Stone, Pres.; Henry D. Brown, Sec.

W. Va., Matoaka—Matoaka Water & Improvement Co., \$25,000, incorporated by C. H. Gilmer, C. I. Butte and others.

W. Va., Weston—State Game and Fish Comsn., A. B. Brooks, Ch. Game Protector, acquired 9000 acres of forest land in Pocahontas county for reforestation and game reserve.

### Lumber Enterprises

Ala., Birmingham — Estes Lumber Co., Thornton Estes, Pres., has acquired additional property, will erect large storage sheds; total holdings of company are about seven blocks.

Fla., Manatee—Updegraff Lumber Co., will erect 20x300-ft. building for the stocking of sash and doors; have completed a 24x300-ft. shed. (Previously noted.)

Ga., Augusta — Augusta Hardwood Co., capital \$100,000, incorporated by Frank C. Douglas, of Augusta; Wm. E. Douglas, DeLand, Fla., and others.

Ga., Dorchester — Case-Fowler Lumber Co., of Macon, Ga., will probably establish saw mill on the Altamaha river.

Md., Vindex—Three Forks Lumber Co., main office Elkins, W. Va. (lately noted incorporated, capital \$50,000) organized with G. H. Dornblazer, Pres.; Chas. Mullens, Mgr.; has plant, will install circular saw mill, 30 ton geared locomotive, log loader and logging cars; daily output 20,000 ft. (See Machinery Wanted—Locomotive; Log Loader; Cars (Logging).)

N. C., Asheville—Gennett Lumber Co., 323 Haywood Bldg. advises Manufacturers Record, will not develop timber tract in Madison County until next Spring.

N. C., Gastonia—Spencer Lumber Co., Elmer Spencer, Pres. will rebuild plant, burned at loss of \$75,000; not decided as to the location of new plant.

Tex., Houston — Robertson McDonald Lumber Co., increased capital from \$125,000 to \$175,000.

Tex., Houston — Spencer Sauer Lumber Co., increased capital from \$150,000 to \$500,000.

Tex., San Antonio — John J. Kuntz Lumber Co., increased capital from \$40,000 to \$300,000.

Tex., Sweetwater — Bryant Lumber Co., capital \$40,000, incorporated by C. W. Bryant, Claude Renick and others.

Tex., Waco—Davis Lumber Co., has acquired square block, 350 ft. on Franklin St., will expend about \$25,000 on buildings for lumber yard and planing mill.

W. Va., Areola—Smoot Lumber Co., C. D. Howard, Supt. will rebuild plant, burned at loss of \$50,000.

### Metal-Working Plants

Ga., Atlanta — Hec Manufacturing Co., 1205 Fourth National Bank Bldg. is being reorganized; will soon be in the market for additional equipment, including, machinery for drilling, shearing, punching and bending sheet metal 10 gauge and lighter, also one electro plating outfit. (See Machinery Wanted—Metal Working Equipment; Electro Plating Outfit.)

Mo., St. Louis—Dehco Baked Enamelling Co. increased capital from \$10,000 to \$25,000.

### Mining

Ala., Birmingham — Appalachian Iron Co., capital \$10,000, incorporated by W. W. Smith, J. F. Stallings and others.

Tex., Fort Worth—Southwestern Lime Co., capital \$25,000, incorporated by W. H. Slay, U. S. Simon and M. E. Smith; have acquired Panther Lime Co.'s plant, will operate.

Tex., Galveston — American Salt & Chemical Co., capital \$500,000, incorporated by W. L. Ainslie, J. E. Hatch and others.

Tex., Mission — LaJoya Gravel Co., capital \$10,000, incorporated by R. R. Stephen, S. M. Hargrove and others.

### Miscellaneous Construction

D. C., Washington — Wharf—Norfolk & Washington Steamboat Co., will rebuild wharf, wood construction, installing sprinkler system. (Lately noted burned.)

Fla., Boynton-Inlet, etc. — South Lake Worth Inlet Dist. Comms., C. C. McCune, Sec., Lake Worth, Fla., will receive bids until March 10 to construct inlet, its protection and bridge; bridge to be rainbow arch, 100-ft. clear span; jetties are covered by alternate plans, one for pre-cast concrete blocks and other large granite boulders; The Riddle Co., Chief Engr., 705 Guaranty Bldg., West Palm Beach, Fla. (Lately noted.)

La., New Orleans—Ferry Landings—Algiers Public Service Co., Inc., R. P. Nolan, Mgr., Ferry House, Canal St., will receive bids until April 8 for construction of ferry landings for the Third Dist., ferry, consisting of ferry houses, approaches, clusters, etc. separate proposals will be received on the two ferry houses and on the approaches, clusters, lifting devices, etc.

Md., Baltimore—Pier—Baltimore & Ohio R. R. Co., H. A. Lane, Chief Engr. let contract to Frainie Brothers & Halsey Co., 19 W. Franklin St. for the superstructure of pier No. 3, two story building.

Miss., Natchez—Bulkhead—Adams County Board of Supvrs., W. H. Male, Clk., will receive bids until March 4 for making bulkhead and filling in the hole on west side of St. Catherine Creek bridge.

Mo., Kansas City—Tunnel—Marty H. Ramming, Pur. Agt., Second Floor City Hall, will receive bids until March 11 to furnish labor and material and building concrete lined pressure tunnel, 7½ ft. inside diam. and about 15,500 ft. long underneath the Missouri River; with down take and uptake shaft each 10 ft. inside diam. and about 300 ft. deep together with appurtenances; also on March 13 to furnish labor and material and building two concrete lined pressure tunnels, 6 ft. inside diam. and about 11,300 ft. and 14,000 ft. long respectively, along the East and West Bottoms lands in Kansas City, together with appurtenances; each tunnel has 2 waterway shafts 8-ft. inside diam. and 2 construction shafts, average depth 160 ft. deep; plans and specifications on file in office of Board of Fire and Water Comms.; or with Fuller & Maitland, Engrs. 600 Walnut St., Kansas City and with Fuller & McClintock, 170 Broadway, New York City.



Mo., St. Joseph—Swimming Pool — City contemplates building municipal swimming pool on Noyes Blvd. and paving roadway in Parkway. Address The Mayor.

N. C., Wilmington—Incinerator—Details under Land Developments.

Okla., Okmulgee—Swimming Pool — Details under Miscellaneous Enterprises.

Okla., Tulsa—Subway—T. H. Johnson of Sedalia, Mo. has contract for the construction of Fifteenth Street subway under the Katy tracks; specifications call for double driveway, each drive to be 20 ft. wide; estimated cost \$65,000 Dan W. Patton, County Engr.; section of subway to be shared by the railway company and the county.

Tex., Fort Worth—E. G. Ball Grain Co. let contract to Jones Hettelsater Construction Co., Kansas City, Mo., for construction of 10 grain storage tanks, reinforced concrete; R. V. Glenn, Constr. Engr. (Lately noted.)

Tex., Fort Worth—Kimbell Milling Co., Sherman, Tex. reported to expend \$1,000,000 for construction of grain elevator. Wire to the Manufacturers Record from the company states "Amount mentioned entirely out of line; have let contract for a half million bushel terminal concrete elevator to Jones Hettelsater Construction Co., of Kansas City, Mo.; work begins Monday; machinery has been purchased."

Tex., Galveston—Grade Raising—City will receive bids until March 1 for grade raising, involving approximately 3,800,000 cu. yds. sand filling; plans etc. with C. A. Holt, Jr., City Engr.

### Miscellaneous Enterprises

Ala., Birmingham — Quality Bakery Co., incorporated by O. R. Johnson, Carrie E. Richardson and others.

Ala., Birmingham — American Paint Products Co., incorporated by W. B. Blood, F. O. Darby and others.

Ala., Birmingham — Dixie Metal Products Co., capital \$10,000, incorporated by W. E. Gillson, Ben Davis and others.

Ala., Birmingham — Federal Bakery, incorporated by V. Pennington, Frank Frescher and others.

Ala., Birmingham — Marie Louise Candy Co., incorporated by W. H. Hicks, A. L. Lewis and others.

Ala., Birmingham — California Orange Drink Co., incorporated by Geo. H. and Louise W. Crank and others.

Ark., Camden — Electrified Water Co., Robert H. Barnes, 200 Greening St., will erect 24 x 36-ft. frame building for bottling plant; invite prices on equipment including water coolers, bottles, filters, drinking cups drinking cup vending machines, seals and labels, glumiumware, crates, carbonators, bottle washing machinery, etc. (See Machinery Wanted—Bottling Plant Equipment; Crates; Corks.)

Fla., Rock Bluff—C. W. Norton of Bristol, Fla., has acquired turpentine plant, will develop and improve.

Ga., Athens—Dr. Hollidays Arsenic Meal Co., incorporated by A. C. Holliday, John J. Wilkens and others.

Ky., Ashland — Caldwell Construction Co., incorporated by Robt. T. Caldwell, H. Van Antwerp, Jr., and others.

Ky., Danville—Boyle County Stockyard Co., J. T. Ware, will establish stockyard, build sheds, etc., size and cost not determined. (Lately noted.)

Ky., Frankfort—Smith-Kelly Co., capital \$25,000, incorporated by N. B. Smith, L. M. Kelly and S. H. Rowland.

Ky., Louisville — Chesterfield Shirt Co. increased capital from \$10,000 to \$50,000.

Ky., Louisville — Camel Manufacturing Co., incorporated by Wm. L. Hoge, C. B. Stransbury and others.

Ky., Louisville—I. Sidney Jenkins & Co., capital \$100,000, incorporated I. Sidney Jenkins, Edw. O. Dorsey and others.

La., Litcher—St. James Perique Tobacco Co., Inc., increased capital from \$50,000 to \$100,000.

Ky., Marion—Commercial Fluorite Co., capital \$25,000, incorporated by James Forrester, John G. Bellamy and others.

La., New Orleans—Acme Process Asphalt Grouting Co. Inc., capital \$300,000, chartered, John C. Bartley Edgar J. Kelly and others.

La., New Orleans—Geo. W. Reese Advertising Agency, Inc., increased capital from \$10,000 to \$25,000.

La., Shreveport — Crandall Producing Co., capital \$100,000, incorporated with Thos. W. Crandall, Pres.; M. G. Caldwell, Sec.

Md., Baltimore—G. and M. L. Lang will erect 1-story, brick, ice and ice cream manufacturing plant at 2858 Pennsylvania Ave., cost \$30,000.

Md., Baltimore — The Hendler Creamery Co., 1100 E. Baltimore St., increased capital from \$400,000 to \$900,000.

Md., Baltimore—S. A. Ripple & Bros., Inc., 1206 Ridgely St. has acquired 80x500 ft. site at Westport, will erect new plant; plans and construction by owners.

Mo., Carthage—H. E. Williams Products Co., capital \$18,000, incorporated by H. E. Williams, C. B. Pratt and others.

Mo., Joplin—Pennington Drug Co., capital \$250,000, incorporated by W. O. Evans, V. J. M. Hinton and others.

Mo., Kansas City—Dean Rubber Co., lately noted incorporated with \$150,000 capital, W. J. Dean, Pres. will erect 2-story, fire-proof factory, 90x100 ft. in North Kansas City.

Mo., Kansas City—White Satin Sugar Co., capital \$34,500, incorporated with J. H. Woodward, Pres.; Ralph Woodward, Jr., Sec.

Mo., Kansas City—Sombart Investment Co., incorporated by Roy T. Collins, Garrett A. Walsh and others.

Mo., St. Louis—Isler-Thompson Lithographing Co. increased capital from \$50,000 to \$100,000.

Mo., St. Louis—Keep Klean Kover Co., capital \$13,000, incorporated by A. L. and E. L. Fuchs, to manufacture auto seat covers.

Mo., St. Louis—Rochester Last Works, of Rochester, N. Y., have leased building 3417 Chouteau Ave. and will establish shoe manufacturing plant.

Mo., St. Louis—Stanley Hat Co., incorporated by I. H. Nies, E. Fleishman and others.

Mo., St. Louis—Wright Speciality Mfg. Co., 802 N. Jefferson Ave., organized with D. M. Wright, Pres.; Ray Barnard, Sec.; manufacturers leather specialties. (Lately noted incorporated with \$30,000.)

Mo., Webb City—Wm. Hunter Electric Co., incorporated by Wm. Hunter, C. V. Wright and others.

N. C., Asheville—Carolina Radiolite Battery Co., capital \$100,000, incorporated by N. W. Denby, J. C. Adams and others.

N. C., Albemarle—Stanley Hardware Co., capital \$40,000, incorporated by J. E. Gantt, M. H. Morton and others.

N. C., Charlotte — Famous Players-Lasky Corp., Hugh Owens, branch manager, will rebuild exchange located at Church and Fourth Sts.; burned at loss of \$400,000; 50x100 ft.; 1 story; steel and concrete; temporary headquarters of company 8 S. Graham St.

N. C., Charlotte—Mills & Moring, Inc., capital \$25,000, chartered by H. B. Moring, J. P. Mills, Jr., and others.

N. C., Gastonia—City will probably let contract to Gamewell Fire Alarm and Telegraph Co., Newton Upper Falls, Mass., for fire alarm system; cost \$18,000.

N. C., Greensboro — Vansbory Clothing Co., increased capital from \$25,000 to \$250,000.

N. C., Mooresville—Mooresville Ice Cream Co., capital \$50,000, incorporated by Charlie Mack, E. F. Francis and others.

N. C., Raleigh—Southern Extract Co., Inc., capital \$100,000, incorporated by C. O. Vreeland, W. C. Bryde and others.

N. C., Wilson—Wilson Tobacco Warehouse Co., capital \$15,000, incorporated by W. E. Sugg, C. H. Webb and others.

Okla., Miami—Miami Creamery, Oliver McGhee, Mgr., will erect \$10,000 addition to plant and install \$6000 worth of equipment.

Okla., Okmulgee — Amusement Park—Charles E. Douglas reported to expend \$100,000 on development of resort including picnic grounds, swimming pool, dancing pavilions, motion picture auditorium and other amusement devices.

Okla., Webb City—Public Utilities Co., capital \$25,000, incorporated by W. A. Maxwell, Webb City; E. F. Hall, Burbank, Okla.

S. C., Florence—B. F. Shaver of Manning, S. C., has option on building and will remodel for canning plant.

Tenn., Chattanooga—Chattanooga Battery Box Co., capital \$100,000, incorporated by Lee K. Wert, T. C. Betterton and others.

Tenn., Chattanooga—Chattanooga Bottle and Glass Co., W. H. Meacham, Pres., will increase capacity of plant, install additional machinery, etc.

Tenn., Chattanooga—Chattanooga Mattress Co., 114 Market St., has secured 4 stories and basement building on Chestnut St. for mattress plant; will install 16 windows, sprinkler system, electric elevator, concrete first floor, etc. (Lately noted.)

Tenn., Chattanooga — Tennessee Paper Mills, John Stagmaier, Pres., is installing new boiler plant to burn pulverized coal, containing two new 500 H. P. Heine boilers, equipped with Erie City coal pulverizing machinery; have erected steel self supporting smoke stack 185 ft. high and 8 ft. in diam. at the top; electric equipment consists of two 500 k.w. direct connected generators. (Lately noted expending \$75,000 for improvements.)

Tenn., Cookeville—Putman County Truck Growers Assn. will erect sweet potato storage house.

Tenn., Franklin—Trice-Smith Reynolds Co., capital \$50,000, incorporated by J. D. Trice, H. H. Smith and others.

Tenn., Etowah — Capt. Thomas F. Peck acquired Etowah Enterprise, a weekly publication.

Tenn., Greeneville—Company has been incorporated with \$75,000 capital, by A. C. Rankin, J. S. Bernard, Jr. and others.

Tenn., Knoxville—Leslie Candy Co., capital \$10,000, incorporated by Leslie Johnson, W. R. Jett and others.

Tenn., Memphis—Consolidated Molasses Storage Co., capital \$10,000, incorporated by J. T. Morgan, S. T. Please and others.

Tenn., Memphis—Hirsh Manufacturing Co., capital \$20,000, incorporated by Ben. J. W. Hirsh, Milton Altenberg and others.

Tenn., Memphis—Patterson Transfer Co., increased capital from \$150,000 to \$300,000.

Tenn., Memphis—Phillips Brooks Co., capital \$10,000, incorporated by H. E. Brooks, Joe Thompson and others.

Tenn., Memphis—W. Cleveland Johnson has acquired building at 161 Madison Ave. for Johnson's Greenhouses.

Tenn., Nashville—L. J. Cambron Co., capital \$25,000, incorporated by L. J. Cambron, G. H. Godley and others.

Tex., Austin — C. J. Martin & Sons, capital \$20,000, incorporated by C. J. and L. A. Martin.

Tex., Austin — Davis-George Manufacturing Co., increased capital from \$100,000 to \$250,000.

Tex., Dallas—Fairlyland Amusement Co., capital \$50,000, incorporated by L. M. Kirks, E. E. Harrington and others; will expend approximately \$1,000,000 in equipment for amusement park, including scenic railways, and other pleasure devices; Carl H. Edwards has portion of contract.

Tex., Dallas—Laughing Water Laundry, capital \$25,000, incorporated by E. C. Harris, O. S. Boneshoe and others.

Tex., Dallas—Ralston Manufacturing Co., capital \$40,000, incorporated by L. J. Westheimer, A. L. Lehman and others.

Tex., Dallas — Wolff Manufacturing Co., of Chicago, Thomas M. Wallace, Dallas representative, will reorganize company with increase of \$300,000 capital; has acquired plant of Warden Supply Co., and will consolidate with L. Wolff Manufacturing Co. of Texas.

Tex., Dallas — Johnson-North X-Ray Co., capital \$24,000, incorporated by Frederick Johnson, J. J. North and others.

Tex., Galveston — Yellow Cab Co., increased capital from \$10,000 to \$20,000.

Tex., Greenville — Hunt County Fair & Amusement Assn., incorporated by J. Beeton, D. C. Meade and others.

Tex., Houston — Wilson Supply Co., increased capital from \$50,000 to \$100,000.

Tex., Lubbock—Rix Furniture & Undertaking Co., will erect 4 story and basement 78x125 ft. building of brick, stone and steel or brick, stone and reinforced concrete construction; estimated cost \$25,000; will install 1 passenger and 1 freight elevator; Peter & Haynes, Archt., Lubbock.

Tex., Marlin—Economy Cover Co., incorporated by R. R. Eddins, R. C. Burleson and others.

Tex., Palestine—John Burke of Tyler, Tex. will install laundry.

Tex., Port Arthur—Electric Supply Co., capital \$30,000, incorporated by J. F. Stoneburger, W. L. Clinton and others.

Tex., San Antonio—Brown Macaroni Co., capital \$40,000 incorporated by Frank Pizini, Joe Obriotti and others.

Tex., San Antonio—W. K. Ewing Co., Inc., increased capital from \$100,000 to \$150,000.

Tex., Waco — Calcium Arsenate & Lime Co., let contract to E. E. Sanifer, Excellant, Tex., for excavation work on lime plant near Leon Junction; plant will have a capacity for producing 100 tons of lime and 40 tons of calcium arsenate daily; cost about \$150,000.

Va., Abington—Abington Creamery, Inc., capital \$25,000, chartered with S. E. Harkrader, Pres.; B. H. Pippin, Sec.

Va., Coeburn — Chero-Cola Bottling Co., (lately noted incorporated, capital \$25,000) organized with T. B. Hillman, Mgr.; will erect 50 x 100-ft. building; will install ice making machinery, bids open about March 1; daily output carbonated beverages and ice. (See Machinery Wanted—Ice Making Machinery.)

Va., Danville—Liggett & Myers Tobacco Co., let contract to Jno. P. Pettyjohn & Co., Lynchburg, Va. to construct tobacco storage building; 200x120 ft.; fire proof; reinforced concrete. (Lately noted.)

Va., Danville—Tobacco Growers Co-operative Assn., E. L. Walton, Local Mgr., reported to be considering location of storage tobacco house with capacity of 10,000 hogshead.

Va., Newport News—Newport News Construction Co., capital \$50,000, incorporated with H. L. Ferguson, Pres.; Geo. A. Parker, Sec.

Va., Norfolk—Southern Press, Inc., capital \$50,000, chartered with George A. Garey, Pres.; Allen W. McGann, Sec.

Va., Roanoke — Stoke Battery & Armature Work, H. F. Stokes, Mgr., will erect building at Salem Ave. and Commerce St., for recharging batteries and armature winding.

W. Va., Huntington—Charles Boldt Glass Co., Cincinnati, O., reported to remove portion of plant to Huntington.

W. Va., Point Pleasant—Reliance Manufacturing Co., Chicago, Ill., will occupy building on Eleventh St. to be erected by W. H. Vaught as shirt and overall plant; will install 108 power sewing machines.

W. Va., Wheeling—J. L. Stifel Calico Works, Fourth and Main Sts., plans enlargement of plant.

### Motor Cars, Garages, Tires, Etc.

Fla., Stuart — Garages, etc. — A. P. Krueger let contract to S. A. Matthews, of Stuart at \$10,000 to erect 1 story, automobile sales room and garage building on Dixie Highway at Olympia; stucco tile construction; will install all modern facilities for complete repair shop, filling station, etc.

Ga., Savannah—Filling Station—Standard Oil Co. let general contract to R. J. Whalley for the erection of filling station on President and Drayton St.; sub-contracts were also let to the following: for plumbing, heating and sprinkler system to Seckinger & Garwes; roofing to R. A. Cox; painting to T. J. Dooley & Co.; tile work to Georgia Tile Co.; electrical installation to Buck Electric Co.; granite to George R. Worrell and millwork to A. S. Bacon & Sons; contracts for the steel and iron work not awarded. (Lately noted.)

Md., Baltimore—H. and H. Sales Co., 911 Cathedral St., incorporated by E. Ralph Harris, Frederick Hirschfeld, Jr. and others; manufacture automobile parts, etc.

Md., Baltimore—North Eastern Rubber Works, 1982 N. Gay St. (lately noted incorporated, capital \$25,000) organized with Wm. U. Saneman, Jr., Pres.; John J. McCusker, Sec.; Wm. U. Saneman, Sr., Treas.-Mgr.; invite prices on vulcanizing machines to repair tires and rubber boots; bead cutters, pulling machines for old tires and skiving machines. (See Machinery Wanted—Tire and Vulcanizing Machines, etc.)

Miss., Laurel — Southern Automobile Co., increased capital from \$4000 to \$100,000.

Miss., Quitman—Garage—John S. Dabbs, Inc., capital \$20,000, incorporated by John S. and M. Dabbs and others.

Miss., Tutwiler — York Motor Co., incorporated by Walter L. York and others.

Mo., Carthage—Pioneer Oil & Refining Co., capital \$40,000, incorporated by F. B. Oswald, J. M. McMillan and others; will manufacture automobile tires, etc.

Mo., Kansas City—Filling Station—Sinclair Refining Co. will erect filling station at 15th and Chestnut Ave.

Mo., St. Louis—Adrian Motor Service Co., incorporated by J. A. Doyle, A. P. Houts and others.

Mo., St. Louis—Glenn Tire Co., capital \$34,000, incorporated by John Glenn, C. S. Edmiston and others.

N. C., Biscoe—Sand Hill Oil Co., capital \$50,000, incorporated with N. V. Lang, Pres.; B. L. McCaskill, Sec.-Treas.; will erect storage tanks, and equip filling stations, etc.

N. C., Charlotte—Auto Parts & Salvage Co., capital \$25,000, incorporated by Alex. and A. J. Little and others.

N. C., Mebane — Eagle Oil Co., let contract to A. C. Allen for the rection of filling station, corner 3rd and Main St.; A. G. Mould, Archt.

N. C., Shelby—Filling Station, etc.—J. F. Ledford will erect 1 story, 44x110-ft. combination garage and filling station, brick construction, estimated cost \$7500; Louis H. Ashbury, Archt. (Supercedes recent item.)

N. C., Wilmington—U Drive It, incorporated by J. W. Creasy, J. J. Burney and others.

N. C., Winston-Salem—Tire Service Co., capital \$100,000, incorporated by J. L. Gilmer, J. L. Love and others.

Okla., Oklahoma City—Used Ford Exchange capital \$10,000, incorporated by J. T. McKinney, C. M. Sloan and others.

S. C., Spartanburg—Burwell Motor Co., capital \$50,000, incorporated by Ernest Burwell and Faith C. Burwell.

Tenn., Memphis — Stubblefield Auto Co., 848 Union St., incorporated by A. P. and A. D. Stubblefield, Ed. H. Hern and others.

Tenn., Nashville—Service Station—O. W. Thomas & Son let contract to R. A. Griffin, 2015 Eighth Ave. to erect 1 story, 50x170-ft. service station at 1900 Eighth Ave., brick and steel construction, composition roofing, concrete foundation and floors; estimated cost \$15,397.

Tex., Abilene—Western Motor Oil & Supply Co., incorporated by J. M. Radford, A. V. Smith and others.

Tex., Marshall—R. S. Smith Motor Co., capital \$25,000, incorporated by R. S. Smith, E. R. Hicks and others.

Tex., San Antonio—Garage—Uhl & Kalies Co., Inc., chartered by Otto C. Uhl, Franck E. Kalies and others.

Tex., Sweetwater—C. S. Boyles Motor Co., capital \$18,000, incorporated by C. S. Boyles, A. C. Browning and others.

Va., Blacksburg—Blacksburg Motor Co., capital \$30,000, incorporated with W. L. Crumpacker, Pres.; R. C. Heavener and others.

Va., Norfolk—Arthur W. Depue, Inc., capital \$200,000, incorporated with Marie L. Depue, Pres.; I. E. Jordan, Sec.

Va., Pulaski—Bell Service Corp., capital \$25,000, incorporated with R. I. Brown, Pres.; F. J. Bell, Sec.

Va., Richmond—Davis Brothers, Inc., will erect building for the West Trust Co. on Summit Ave.

Va., Roanoke—Garage—Roanoke Flint Co., capital \$25,000, incorporated with Lillian E. Harris, Pres.; C. L. Harris, Sec.

W. Va., Clarksburg—Clarksburg Paige-Jewett Co., capital \$25,000, incorporated by E. M. Pearcy, D. R. Martin and others.

W. Va., Sistersville—Service Garage, capital \$40,000, incorporated by Harry E. Roberts, Geo. W. Thomas and others.

W. Va., Wheeling—Wheeling Traction Co. let contract to R. R. Kitchen Co., to construct operating barns and sand house at Third St., Warwood; estimated cost \$50,000.



## Railway Shops, Terminals, Round-houses, Etc.

Ala., Birmingham—The Southern Railway System, H. W. Miller, V.-P., in charge of operating department, reported to have let contract to Dwight P. Robinson & Co., Inc., New York, to erect mammoth locomotive plant at Finley Yards, costing several million dollars; plant will be located at Finley and Emily Ave., and built in 2 distinct units, one for repair of locomotives and one for repair of cars.

Locomotive repair shops will be of the transverse type and include the following: 80x568 ft. erecting shop, 95x468 ft. machine shop, 100x240 ft. boiler shop, 100x260 ft. smith shop, 30x80 ft. forge shop, 50x80 ft. flue shop, 80x90 ft. power house, 55x200 ft. store house and office, 24x60 ft. paint shop, 100x158 tank shop, 45x100 ft. firing-up shed, and 42x128 ft. wash and locker building; the erecting shop will have 24 tracks, served by an electrically operated transfer table of 250 tons capacity, traveling its entire length, also served by one 150 ton overhead traveling crane and two 15 ton overhead cranes, each running full length of building; machine shop will be served by two 15 ton cranes, running its full length in a 60 ft. bay; boiler shop will be served by 20 ton crane with a 60 ft. span and boiler, smith and flue shop having 20 ton crane, 60 ft. span, operated in a 800 ft. runway; flue shop will be equipped with electric flue welders and modern flue handling machinery.

Car repair shop will include the following: 108x598 ft. steel car repair shop, 51x156 ft. annex machine shop, 55x125 ft. wheel shop, 41x240 ft. dry lumber shed, 100x243 ft. wood-working mill, 25x50 ft. paint house, 52x400 ft. scrap dock, 35x60 ft. reclamation shop, 36x90 ft. wash and locker building; car shop will include 3 longitudinal bays, one served by two 15 ton cranes with 35 ft. span and another by two 20 ton crane with 40 ft. span; both locomotive and car shops will be equipped with new machinery throughout, electrically driven, each having individual motor; buildings will be piped throughout for supplies of water, steam and compressed air and wired for electricity; system of pipes will be provided for protection from water service pipes, reservoir for rainwater with 200,000 gal. capacity; plant will require more than 10 miles of service track; foundations for various machines will be laid with foundations of buildings, machines to be installed while buildings are constructed; new shop will do all locomotive and car repair work for the Southern Railway Co. and the Alabama Great Southern R. R. in Birmingham. (Lately noted.)

## Railways

Tex., Rio Grande City—Rio Grande City Railway Co., minimum capital stock \$22,000, has been chartered to build a line from Sam Fordyce, Tex., on the New Orleans, Texas & Mexico Railway, to Rio Grande City, 22 mi. Construction soon; all material received. Incorporators and directors Albert Steves, Franz C. Groos, John B. Carrington, S. B. Riearby, Percy Terrell, J. H. Savage, Wallace Carnahan, Jr.; Frank Winerich and H. Lee Ransom, all of San Antonio, Tex.

## Road and Street Construction

Ala., Bessemer—Board of Revenue plans building east and west highway through Bessemer.

Ala., Decatur—City will receive bids until March 17 to improve 160,000 sq. yd. streets with following materials: Pavé-A-Road asphalt, asphaltic concrete, Kentucky rock asphalt, emulsified concrete asphalt, Portland cement concrete, Warrenite bitulithic,

Tarvia X penetration, or bituminous surface; Ordiances Nos. 125, 126, 127, 128, 136, 137 and 138; plans, etc., from E. W. Collier, City Clk.

Ala., Ensley—City plans expending \$26,000 to pave 46th St., from Ave. N. to Martin Ave. and Ave. P. from Martin Ave. to Bessemer Blvd.; 2-in. asphaltic concrete surface on 5-in. concrete base. Address The Mayor.

Ala., Florence—City plans 5 mi. street paving and 3 mi. storm and sanitary sewers; approximate cost \$300,000; W. M. Paxton, Engr.; W. S. Eastep, Mayor. Lately noted. (See Machinery Wanted—Asphalt.)

Ala., Montgomery—City Comm., contemplates paving Clayton St. from Five Points to Holt St.

Ala., Troy—City will receive bids until Feb. 22 for street paving and curbing; brick, concrete asphaltum, asphaltum mixtures or wood block paving; concrete curbing; estimated cost \$300,000; plans, etc., on file; M. D. Pace, City Engr.

Ark., Camden—Commrs. of Paving Dist. No. 5 plan paving streets in Parkview, Shady Grove and Washington Heights.

Ark., Mountain Home—Chamber of Commerce, H. D. Morton, Pres., interested in building crushed rock grade surfaced with gravel road from Mountain Home 10 mi. west to Cooper Dam Site. (Lately noted.)

Ark., Pine Bluff—Commrs. of Paving Dist. No. 71 will receive bids until March 3 to resurface with vitrified brick blocks certain streets and portions of streets in district; 21,000 sq. yd. brick pavement; 607 sq. yd. base repairs; 1120 lin. ft. combination curb and gutter; 2100 sq. yd. 60-in. concrete base; 300 lin. ft. 18-in. and 36-in. storm sewers; two 5-ft. standard manholes; 4 standard catch basins; plans, etc., from Frank R. Allen, City Engr.

Fla., De Funiak Springs—City will receive bids until March 7 for 8870 sq. yd. 6-in. concrete pavement with 5000 ft. 3/8-in. Careys elastic expansion joint or equivalent; optional bids on brick with 3-in. asphalt filler on sand cushion and concrete base 4-in. mix 1:3:6; 3000 ft. concrete curb, 6 x 18-in. mix 1:2:3; 2000 cu. yd. excavation; plans, etc., from Malcolm Bruce, City Engr.

Fla., Fort Lauderdale—Broward County Commrs. plan building 1 mi. road connecting Prospect road with Dixie Highway north of Colohatchee; Redundo Beach Corp. plans building road from Dixie Highway to Beach, starting near Lauderdale golf course.

Fla., Miami—Details under Land Developments.

Fla., Miami—Dade County Commrs. plan building road on east side of Florida East Coast right of way, from Buena Vista to Broward County line, contemplates voting on \$226,000 bonds.

Fla., Moore Haven—Glades County plans road building; will vote first week in March on \$275,000 bonds. Address County Commrs.

Fla., Pensacola—Escambia County will receive bids until Feb. 26 for 100-ft. section of pavement, connecting Pensacola City paving on North Palafox St. with paving on Federal Aid Project No. 34, Pensacola-Flomaton road; plans, etc., from Jas. MacGibbon, Clk. of Circuit Court.

Fla., St. Petersburg—City will receive bids until March 10 to lay 400,000 sq. yd. brick or asphalt rock pavement, with granite curb; S. S. Martin, Acting Director of Finance.

Florida—State Road Dept., Tallahassee, Fla., plans completing State Road No. 2, from Georgia line to Fort Myers, through Lake City, Gainesville, Ocala, Orlando, Kissimmee, Bartow, Wauchula, Arcadia and Punta Gorda; will receive bids in March.

Fla., Tallahassee—City will receive bids until Feb. 26 to grade, pave, curb and install storm sewers and structures as follows: Project No. 2—8481 sq. yds. sheet asphalt paving and Florida lime rock base; 520 lin. ft. curb and gutter; 530.6 lin. ft. 6x18 gutter; catch basin; Project No. 3—5893 sq. yds. sheet asphalt paving surface, and Florida lime rock base; 3635 cu. yds. excavation; 5688 lin. ft. curb and gutter; 417 lin. ft. 15-in. storm sewer; 6 catch basins; plans, etc., from W. Austin Smith, City Mgr.

Fla., Tampa—State Road Dept., Tallahassee, has appropriated \$100,000 to widen about 12 mi. Riverview road section of State Road No. 5.

Fla., Titusville—Brevard County Ocean Boulevard Assn., incorporated by F. M. Everett, Titusville; C. W. Nelson, Melbourne; W. L. Gleason, Eau Gallie; contemplates ocean boulevard along beach through Brevard County.

Fla., Wauchula—Hardee County plans road building; \$870,000 available; George R. Ralph, Engr.

Ga., Atlanta—City and Fulton County plan repaving Broad St. from Luckie to Mitchell; approximate cost \$80,000; Walter A. Sims, Mayor.

Ga., Atlanta—City will receive bids soon to pave 24 streets, including Atlanta, Cherokee, Highland, May Aves.; Beecher, Baker, Broad, Crew, Cain, Gaston, Hall, Houston, Jackson, Sts., etc.; estimated cost \$380,573. Address The Mayor.

La., New Orleans—City plans paving Willow St. Address Mayor Shane.

Md., Baltimore—City plans paving, repaving and resurfacing with improved pavements Lafayette Ave., from Warwick to Ben-talou; Lawnview and Cliffmont Aves., from Belair road to Annetta Ave.; Elmley Ave. from Highview to 400 ft. east; Snowden from 35th to 36th; Allendale from Edmondson to Harlem; Address R. Keith Compton, Chmn., Paving Comm., 214 E. Lexington St.

Md., Towson—Baltimore County Commrs., will receive bids until Feb. 28, to improve 2 sections of roads as follows: .8 mi. 3rd Ave. from Hammonds Ferry road to Hollins Ferry road, 11th Dist.; .8 mi. Carroll road from end of improved road; build reinforced concrete bridge on Glen Arm road over Gunpowder River, Cromwell's Bridge site, 11th Dist.; plans, etc., from Samuel A. Green, Roads Engr.

Miss., Greenwood—City plans paving 12 streets, including Church from Dewey to Lamar; George from Carrollton Ave. to Front St.; Washington, from Main to McLemore; Market from Fulton to Henderson; Henderson from Market to Church, etc.; will vote March 6 on \$96,000 bonds. Address The Mayor.

Miss., Macon—Noxubee County, Road Commrs. of Supvrs. Dist. No. 5, will receive bids until March 3 to improve 2 roads: Raise grade 18-in. across Lynn Creek Swamp on Berry Morris road; grade and sand-clay surface 300 yds. road on Ed. Dotherow road; plans, etc., on file.

Mo., Independence—Jackson County will receive bids to grade Winner road, Washington Blvd., from eastern limits of Kansas City to intersection of Van Horn road. Address County Engr. Koehler.

Mo., Moberly—City plans re-surfacing and widening Rollins St., from Clark to Morley, and improving Williams, and Coates Sts. Address The Mayor.

Mo., Poplar Bluff—City contemplates paving 6th, Reynolds, 8th and Cedar Sts. Address The Mayor.

Mo., Springfield—Springfield Special Road Dist., C. O. Sperry, Pres. of Board, plans



various street improvements as follows: Macadamize Circle Drive; Fremont Ave. from Catalpa St. to Schweitzer road; 1.4 mi. Bennett Ave. from Fremont to National Blvd.; also plans laying asphalt on several streets in conjunction with City Comm., including Scenic Drive, from National Blvd., through Zoo Park, to Bolivar road; will co-operate with Park Board to improve drives in Phelps Grove Park.

Mo., St. Joseph—Details under Miscellaneous Construction.

Mo., Trenton—City plans paving sections of following streets: Laclede, McPherson, 8th, Tindale, Lawn, Lulu, 9th, Princeton road, and Moberly Park Circle. Address The Mayor.

N. C., Hickory—City plans grading 75-ft. street through Carolina Park to connect with 11th Ave. on west, and 19th Ave. and 8th st. on east. Address The Mayor.

N. C., Lenoir—Caldwell County contemplates top soiling road from Lenoir to Wilkes County line. Address County Commrs.

N. C., Lenoir—State Highway Dept., Raleigh, will receive bids in March for 12.52 mi. of Lenoir-Granite Falls link, in Lenoir-Hickory road. (Lately noted.)

N. C., Morganton—City plans street improvement; voted \$150,000 bonds; R. W. Pipkin, Mayor.

Okla., Cherokee—City plans hard surfacing with chat, North Grand Ave. from north end of pavement to Orient tracks. Address The Mayor.

Okla., Claremore—Rogers County plans building 5 hard surfaced roads, totaling approximately 100 mi. as follows: From Tulsa County paving, north through Claremore to Craig County line, near Catale; west from Claremore to Tulsa County line near Collinsville; east to Mayes County line on Pryor road; south from Claremore through Tiawa and Choteau to Wagoner County line; north to Nowata County line; federal aid to furnish \$300,000. Address County Commrs.

Okla., El Reno—City plans paving Mill St. from Macomb to Hoff Aves., and Jenkins from Williams Ave. to Rock Island. Address City Engr.

Okla., Oklahoma City—City let contract to Tibbets & Pleasants, Tulsa, to pave 1 mi. in Central Park addition.

Okla., Oklahoma City—City received low bid from Tibbets & Pleasants, Tulsa, at \$8,474, to pave Hill and 33rd Sts. between Western and Walker Sts.; Olle Ave. from Hill to 33rd; Shartel from 32nd to 34th.

Okla., Oklahoma City—State Highway Comm., Oklahoma City let contract to W. L. Eby, Oklahoma City, at \$12,522.50 to complete system of sidewalks around State Capitol Bldg.; 70,000 sq. ft. sidewalks; 250 ft. curb; 16,000 lin. ft. expansion joint; 10 cu. yd. Class A. concrete.

Okla., Sapulpa—Creek County plans hard surfacing 5 roads, totaling about 40 mi., as follows: 9 mi. through Tiger Township; 12 mi. to Mannford; 6 mi. in Mannford township; 5 mi. west of Sapulpa on Ozark Trail through Bristow; 9 mi. east of Bristow on Ozark Trail; federal aid \$425,000; County and Township paying like amount. Address County Commrs.

Okla., Tulsa—City plans expending \$438,157 for street paving, including E. 11th St.; bids will be received until March 3. Address City Engr. Schultz.

S. C., McColl—Town plans street improvement; voted \$50,000 bonds. Address The Mayor.

S. C., Walhalla—City plans paving Main St.; will vote March 4 on \$50,000 bonds. Address The Mayor.

Tenn., Brownsville—Haywood County plans building Bristol Highway from Brownsville to Tipton County line; sold \$150,000 bonds. Address County Commrs.

Tennessee—State Highway Dept., Nashville, let contract to grade and construct drainage structures on 8 road projects as follows: Federal Aid Projects Nos. 95 and 97, Sullivan County, grade, 14.41 mi. concrete between Blountsville and Kingsport, including 2 bridges, to Dickson Contracting Co., Savannah, Ga., at \$583,186.42; No. 100, Haywood County, 16.07 mi. between Blountsville and Tipton County line, to Little & Dean, Memphis, at \$106,700.57; State Aid Project No. 116, Perry County, 13.49 mi. between Linden and Lewis County line to C. & G. Construction Co., Hohenwald, at \$82,659.44; 130, Cumberland County, 15.56 mi., between Crossville and White County line, including 3 bridges, to A. M. Cook, Oneida, at \$168,489.90; No. 139, Montgomery County, .63 mi. between Cumberland River Bridge and City Ferry road, to Federal Construction Co., Nashville, at \$15,636.55; No. 150, Coffee County, 7.60 mi. cement concrete, between Manchester and Hillsboro, including 2 bridges, to Citizens Engineering & Construction Co., Savannah, at \$114,105.65; No. 153, Greene County, 2.25 mi. waterbound macadam surface, 10-ft. wide, including channeling shoulders and ditching, between point north of Nolichucky River and point near Caney Branch, to Anderson & Scott, Harriman, at \$14,257.50.

Tenn., Chattanooga—Details under Land Developments.

Tenn., Jackson—City and Mobile & Ohio Ry. Co., E. E. Norris, V.-P., St. Louis, Mo., plans graveling highway from Madison St. to railroad shops at Claymore; railroad to furnish gravel. Address The Mayor.

Tenn., Murfreesboro—Rutherford County plans building federal highways to Bedford, Cannon and Coffee County lines, voted \$300,000 bonds; rebuilding turnpikes in County voted \$450,000 bonds. Address County Commissioners.

Tenn., Nashville—Board of Public Works will receive bids soon to repair following streets: Villa from Tremont to Belcourt; 28th Ave. from West End Ave. to Vanderbilt Place; Bate Ave. from 10th to 12th; Capers Ave. from 24th to 28th; 16th Ave. from Buchanan to Clay; Shelby Ave. from 14th to 18th; Maxwell Ave. from McFerrin to Gallatin Ave., formerly Main St.; all Kentucky rock asphalt; Maxwell House Alley, from Union to Church Sts.; Belcourt St. from 16th to 18th Aves.; both granite paving.

Tenn., Obion—Chamber of Commerce interested in paving business streets.

Tenn., Oneida—City plans improving and widening to 44 ft. Main St. from intersection with Railroad St. to Baptist Church. Address The Mayor.

Tenn., Sparta—State Highway Dept., Nashville, let contract to Boyd Williams, Murfreesboro, Tenn., at \$376,971.04, to grade, construct drainage structures, and lay coarse stone base with bituminous macadam surface, on 13.64 mi. road, between Sparta and Warren County line, including reinforced concrete bridge.

Tex., Angleton—Brazoria County plans 2 road projects as follows: 7.73 mi. Stratton Ridge road, section of State Highway No. 19, from Bastrop Bayou south, Federal Aid Project No. 387; approximate cost \$96,500; E. N. Gustafson, County Engr.; 10.88 mi. State Highway No. 19 in Road District No. 16, shell and macadam base; bituminous topping; will receive bids in about 30 days; approximate cost \$206,166; H. W. Munson, Jr., Engr.; J. T. Loggins, County Judge.

Tex., Austin—Travis County will receive bids until Feb. 23 to construct drainage structures on 3 sections of road, totaling 11 mi. in Manchester Dist. as follows: From Fredericksburg road to Manchaca; from Manchaca to Bear Creek; from Manchaca to Post road; estimated cost \$30,000; 863.64 cu. yd. concrete; 55,358 lbs. reinforcing steel; O. Leonard, County Engr., Box 256; Geo. S. Mathews, County Judge.

Tex., Austin—Travis County plans 10 mi. State Highway No. 20, Austin-Houston Highway, from point 2 mi. east of Manor, through toward Austin to end of completed project; crushed rock base; asphalt top; estimated cost \$240,000; O. Leonard, County Engr., Box 256; Geo. S. Mathews, County Judge.

Tex., Austin—Travis County plans building 3 roads as follows: Re-surface 11 mi. State Highway No. 2, south from city limits to Hays County line; 20-ft. wide gravel surface added to old surface treated road, change location and surface with 18-ft. wide bituminous surfacing; estimated cost \$138,500; construct concrete drainage structures on 8 mi. Pflugerville road from intersection with State Highway No. 2 to Pflugerville, to Williamson County line via Hutts; first 3 mi. surfaced with crushed stone, 18-ft. wide, with 16-ft. wide bituminous top; other 5 mi. with 18-ft. wide gravel; estimated cost \$100,600; construct reinforced concrete drainage structures and gravel, surface 16-ft. 17½ mi. Webberville road from city limits of Webberville to Bastrop County line; O. Leonard, County Engr.; Geo. S. Mathews, County Judge.

Tex., Baird—Callahan County will receive bids soon for 9.62 mi. bituminous macadam pavement on Bankhead Highway, from Eastland County line through Putman; approximate cost \$248,000; T. H. Webb, County Engr.; V. B. Gilbert, County Judge.

Tex., Ballinger—Runnels County let contract to Tibbets Construction Co., Mineral Wells, Tex., at \$55,000, to grade and construct drainage structures on 9.36 mi. Hatchel Road, State Highway No. 30.

Tex., Bellville—Austin County, Precinct No. 1, plans road building; contemplates voting on \$450,000 bonds. Address County Commrs.

Tex., Benjamin—Knox County plans building 3 roads, totaling 65 mi. as follows: 10 mi. State Highway No. 30, through Munday and Goree; 10 mi. on F. F. Highway; road extending north from Munday to Vera to Foard County line; also lateral county roads; will vote March 1 on \$250,000 bonds; N. S. Kilgore, County Judge.

Tex., Brady—McCall Engineering Co., Waco, was awarded contract at \$41,100 for 4.4 mi. road on State Highway No. 9.

Tex., Bryan—City let contract to Smith Bros., Dallas, Tex., to lay 25,000 sq. yd. of paving.

Tex., Corsicana—City will receive bids until March 11 to pave streets with following materials: Vertical fibre brick, asphalt filler; asphaltic concrete, fine and coarse aggregate; sheet and Uvalde rock asphalt, limestone rock asphalt, Warrenite bitulithic, Portland cement concrete; granite concrete, Willite, amiesite, asphalt macadam, direct penetration; asphalt macadam, direct inverted penetration, rawhide; 53,225 sq. yds. pavement; 9159 sq. yds. valley gutters; 40,330 cu. yds. curb and gutters; adjust manhole covers, construct sewer inlets and outlets, etc.; plans, etc., from Wm. W. McClendon, City Engr.; J. S. Eubank, Mayor.

Tex., Colorado—Details under Bridges, Culverts, Viaducts.

Tex., Colorado—Mitchell County plans building concrete road on Bankhead High-

way, across County from east to west; will vote March 22 on \$325,000 bonds; State and federal aid \$650,000. Address County Tex., Dallas—Details under Land Development.

Tex., Eastland—City Commrs. let contract to Chapin-Kemp Construction Co., San Antonio, to pave Moss St. from N. Lamar to American Ave.; White from N. Seaman to N. Lamar; Mulberry from W. Main to W. Commerce.

Tex., Electra—City will receive bids until Feb. 22 to furnish material, labor and machinery to improve certain streets; 59,900 sq. yd. pavement; 24,200 cu. yd. earth excavation; 32,000 lin. ft. combined 8-in. curb and 18-in. gutter; 3060 lin. ft. separate curb; 1680 lin. ft. 30-in. separate gutter; rebuild 940 sq. yds. brick pavement; 2770 sq. yds. 6-in. gravel surfacing; alternate bids on following: 3-in. vertical fibre brick, or 2½-in. vertical fiber brick, on 5-in. concrete base; 6-in. reinforced concrete; 2-in. patented asphaltic surface on 5-in. concrete base; plans, etc., from City Sec., and Elrod Engineering Co., Engrs., Dallas, Tex.

Tex., Fort Worth—City will receive bids soon to pave W. 13th St., from Lamar to Macon Sts. Address City Sec. Snow.

Tex., Galveston—City will receive bids until March 1 for grade raising, involving approximately 3,800,000 cu. yds. sand filling; plans, etc., from C. A. Holt, Jr., City Engr.

Tex., Hillsboro—Hill County plans surfacing with 1½-in. bituminous topping 3.91 mi. State Highway No. 6, John Stevens Highway; estimated cost \$22,200; Joe J. Estill, County Engr.; W. L. Wray, County Judge.

Tex., Houston—Harris County will receive bids until March 10 to gravel 1 mi. Piney Point road; also to build bridges on W. Montgomery road; H. L. Washburn, County Auditor.

Tex., Houston—City plans widening and paving Washington Ave.; O. F. Holcombe, Mayor.

Tex., Huntsville—Walker County plans hard surfacing 5 State Highways; contemplates voting on \$150,000 bonds. Address County Commrs.

Tex., Linden—Cass County plans 5 mi. State Highway No. 48, Atlanta-Linden road, from Atlanta to Johns Creek; concrete pavement; Bates section; estimated cost \$113,000; F. E. Hess, County Engr., Medical Arts Bldg., Dallas; S. L. Henderson, County Judge, Linden.

Tex., Lufkin—City plans paving portion of Shepherd Ave. Address City Comm.

Tex., McKinney—Collin County will receive bids until Feb. 27 for 2.17 mi. gravel road on Bankhead Highway, State Highway No. 1, Federal Aid Project No. 234; 22,590 sq. yd. concrete pavement complete; gravel to be furnished by County; F. W. Cawthon, County Engr.; O. T. Murray, County Judge.

Tex., Sherman—Grayson County plans laying permanent type highways and improve county road; contemplates voting on \$5,000,000; H. M. Scott, County Engr., Denison, Tex.; R. M. Carter, County Judge.

Tex., Tyler—Smith County plans building Tyler-Henderson Highway from Tyler to Whitehouse, 12 mi. to southeast, thence to Ormen, near Rusk County line.

Tex., Uvalde—Uvalde County plans 14.16 mi. 1-in. bituminous topping on Sabinal-Klippha road; estimated cost \$77,000; Mark B. Hodges, County Engr.; H. C. King, County Judge.

Tex., Wichita Falls—Wichita County will receive bids until March 10 to build 7.43 mi. Seymour Road, Highway No. 30; 12,169.4

cu. yds. earth excavation; 78,809 sq. yds. one course concrete pavement; plans, etc., from J. M. Isbell, County Engr., Wichita Falls, and State Highway Dept., Austin.

Va., Buckhannon—State Road Comm., Charleston, W. Va., will receive bids until March 10 to grade, drain and pave with bituminous macadam, 5.89 mi. Buckhannon and Cleveland road, in Meade Dist., between Banks District line and Buckhannon District line; Upshur County, Project 3277-B; plans, etc. from Div. Engr. of State Road Comm., Morgantown, State Road Comm., E. B. Carskadon, Sec., Charleston, or County Road Engr. Buckhannon, W. Va.

Va., Hopewell—Board of Aldermen received low bid from Oliver Wright, representing R. J. Lassiter & Co., Norfolk, Va., at \$60,000, to improve Broadway from Hopewell St. to culvert near DuPont City; widen road from 2nd St. to culvert, from between 20 to 31 ft., and install granite curbing.

Va., Norfolk—City plans paving and draining Powhatan Ave. and installing sewerage system in vicinity of 49th, 50th and 51st Sts.; approximate cost \$25,000; Walter H. Taylor, 3rd, Director of Public Works.

Va., Portsmouth—City plans street and sewerage improvements in 8th Ward as follows: Extend Broad St. to High, \$144,656; curb and gutter, \$114,749; sewerage, \$200,000; storm drainage, \$81,751; J. P. Jervey, City Mgr.

W. Va., Charleston—Kanawha County, Union Dist., plans building river road from Dunbar to Nitro; estimated cost \$100,000. Address County Commrs.

W. Va., Huntington—City plans grading, curbing, paving and improving various avenues, streets, roads and alleys, as follows: Burlington and Bradley roads; Pogue, Francis, 37th, 34th, Locust Sts.; Washington Blvd., etc.; A. R. Hunt, City Clk.

W. Va., Huntington—City will receive bids until Feb. 28th to grade, curb and pave following streets and alleys; Richmond from 3rd Ave. to point 200 ft. south of 4th and Richmond Sts.; alley between 6th and 7th and Washington and Adams; alley between 28th and 29th Sts., and 3rd and 4th Aves.; from 1½ Alley between 29th and 30th Sts.; plans, etc. from A. B. Maupin, City Engr.

W. Va., Logan—Island Creek Coal Co., A. R. Beisel, Gen. Mgr., Huntington, W. Va., will receive bids until March 1, private letting, to build 10 mi. one course concrete paving in Logan Dist.; approximate cost \$250,000.

W. Va., Wayne—Wayne County, Grant and Stonewall Dist., plan building hard surfaced road to connect East Lynn and left fork of Twelve Pole Creek; voted \$58,000 and \$111,000 bonds, respectively. Address County Commrs.

W. Va., Williamson—Mingo County let contract to Draper Bros., Bluefield, W. Va., at \$15,000 to grade and drain .8 mi. Sycamore Hill road, near east city limits of Williamson, on State Route No. 8.

W. Va., Winfield—Putnam County, Buffalo Dist. plans building highway from Charleston to Point Pleasant; will vote Feb. 26 on \$60,000 bonds. Address County Commrs.

### Sewer Construction

Ala., Ensley—Commons, in Ordinances authorized construction of sanitary sewer in Martin's Addition.

Ala., Florence—Details under Road and Street Construction.

Ark., Pine Bluff—Details under Road and Street Construction.

Fla., DeFuniak Springs—City will receive bids until March 7 for following sewer construction; work includes 45 ft. of 24-in.,

398 ft. of 21-in., 750 ft. of 18-in., 1172 ft. of 15-in., 61 ft. of 12-in., 767 ft. of 10-in., and 305 ft. of 8-in. storm sewers, 42-ft.; 310 ft. of 21-in., 265 ft. of 15-in., and 290 ft. of 12-in. storm sewers, 4-6 ft.; 12 manholes complete, 4 ft. inside diam. brick 8-ins. cement mortar; 5 street inlets complete with catch basins 5 ft. deep, 4 ft. inside diam. 8-in. of brick and cement mortar; two gutter grates (without curb inlet) complete in special basin requiring 600 bricks for each basin; Malcolm Bruce, City Engr.

Fla., Miami—Details under Land Development.

Fla., Tallahassee—Details under Road and Street Construction.

D. C., Washington — Washington Suburban Sanitary Commn., was authorized by Public Service Commn to issue \$500,000 of 5 per cent bonds.

Ky., Olive Hill — Details under Water Works.

Mo., Sikeston—City, votes March 4 on bonds for sewer system; cost about \$175,000; W. A. Fuller, Engr., St. Louis, Mo. (Lately noted.)

Mo., Washington—M. F. Bühr has contract for sewer in Dist. No. 23.

N. C., Asheboro — Details under Water Works.

N. C., Charlotte—City, W. S. Stancill, Com. Public Works, opens bids Feb. 27 to construct sewage treatment plant and approximately 20,000 ft. of sewers from 36 to 48-in.; Joseph Firth, City Engr.

N. C., Greensboro—Details under Water Works.

Okla., Enid—City, opens bids Feb. 20 to construct extension to sewer system, 8 ft. of vitrified tile pipe, No. 1; opens bids Feb. 27 for one 150 h.p. boiler; F. C. Magruder, City Clk. Lately noted. (See Machinery Wanted—Boiler (Return Tubular).)

Tenn., Greeneville—Details under Water Works.

Tex., Corsicana—Details under Road and Street Construction.

Tex., Dallas—Details under Land Development.

Tex., Dallas—W. G. Cullum awarded contract at \$30,000 for constructing sewer lines in Stephenson Addition; Koch & Fowler, Engrs.

Tex., Paris—City rejected bids for construction of sewerage disposal plant; later may call for new bids. M. C. Welbourn, Engr.

Va., Portsmouth — Details under Road and Street Construction.

### Telephone Systems

Fla., Miami—United Fruit Co. will erect radio plant in section 17 west of Fulford.

Mississippi — Cumberland Telephone & Telegraph Co., office Atlanta, Ga., will expend about \$1,000,000 in the state during 1924 on additions and extensions of the system.

Miss., Jackson—Cumberland Telephone & Telegraph Co., will expend \$60,000 on improvements to system in West Jackson; work in charge of Guy Royles.

Mo., Troy—Troy Telephone Co., capital \$30,000, incorporated by H. H. Garrett, C. B. Watts and others.

Tex., San Antonio—Southwestern Bell Telephone Co., main office Dallas, Tex. let contract to Shane & Dickey, Frost Bank Bldg., San Antonio to erect 1 story, 60x150-ft. semi-fireproof garage and warehouse building; estimated cost \$25,000. (Lately noted.)



### Textile Mills

Ala., Tallassee — Mt. Vernon Woodberry Mills are having plans prepared by J. E. Sirmine & Co., Engrs., Greenville, S. C. for a 30,000 spindle weaving mill and extension to Tallassee plant; 4 stories; reinforced concrete main mill building, 367,144 ft.; opener building 80x100 ft., warehouse and mill village with 175 houses; will manufacture light duck and heaving sheetings; machinery motor driven. (Lately noted.)

Ga., Ringgold — W. A. Nichols of Chattanooga, Tenn., interested in erection of textile mill.

N. C., Burlington—Victor Hosiery Mills, increased capital from \$125,000 to \$500,000.

N. C., Hemp—County Moore Mills, Inc., M. W. Cowgill, Pres., will erect building for manufacture of fine and fancy fabrics; 650x180 ft.; brick and steel sash; install 250 looms; electric power plant; Lockwood-Greene & Co., Engrs., Charlotte, N. C. (Lately noted.)

N. C., Reidsville—Edna Cotton Mills, W. B. Pipkin, increased capital from \$500,000 to \$1,000,000.

Tex., Post—Postex Cotton Mills, Herbert Jones, Agt., are installing 36 automatic wide Stafford looms for Garza wide sheeting.

### Water Works

Alabama — Alabama Water Co., John B. Weakley and Eugene Fies, Executives, Birmingham, Ala., have completed plans for construction of water works in small towns in Alabama, including Leeds and Irondale, in Jefferson county and at Hartselle in Morgan county; cost from \$50,000 to \$100,000 each.

Ala., Birmingham—Alabama Water Co., 1012 American Trust Bldg., will expend \$175,000 for extension of mains to Hueytown and Dolomite; construction by company; F. C. Basenberg, Engr. (Lately noted.)

La., Baton Rouge—Baton Rouge Water Works Co. will expend \$64,000 in extensions to water system.

Fla., Miami—Details under Land Developments.

Fla., Miami—M. Tatum let contract for 32 car loads of cast iron water main a total of 5½ miles for installation along ocean front from Sunny Isles through Tatum's Ocean beach park and various subdivisions of Altos Del Mar.

Fla., Sanford—City, W. B. Williams, Mgr., receives bids until March 10 for equipment and construction of water works plant as follows: Approximately 20 mi. water mains with valves, hydrants, etc.; concrete reservoir and tank foundation; pumping station; wells and well pumps; pumping machinery and other necessary equipment; 200,000 gal. steel tank on tower; Joseph E. Craig, Engr., 427 King St., Jacksonville, Fla.

Ky., Olive Hill — City will vote on bonds for installation of water and sewer system. Address The Mayor.

N. C., Ashboro — City, Arthur Ross, Mayor, will extend water and sewerage system; have let contract for over 5 miles of 6-in. water mains, 52 fire hydrants, 5 miles of sewerage extension including 2 outfalls, and improvements to disposal plant; have also acquired additional land and will soon let contract for dam, etc.

N. C., Greensboro—Elliott Building Co., Hickory, N. C., was lowest bidder at \$246,517 for installing approximately 50 miles of water and sewer lines. (Lately noted.)

N. C., Wilmington—Details under Land Developments.

Okla., Ramona—City will vote Feb. 19 on

\$20,000 bonds for water works. Address The Mayor.

S. C., Saluda — City plans voting on \$40,000 bonds. Address The Mayor.

Tenn., Greeneville—City voted \$45,000 bonds for water works and sewer extension. Address The Mayor.

Tenn., Lawrenceburg — City will vote April 14 on \$25,000 bonds for hydro electric and water construction. Address The Mayor.

Tex., Beaumont—Beaumont Water Works Commn. let contract at \$31,500 for stand pipe to Pittsburgh Des-Moines Steel Co., Des Moines, Iowa.

Tex., Brenham—City, has \$25,000 available for addition to water purification plant. Address The Mayor. (Lately noted.)

Tex., Dallas—Details under Land Developments.

Va., Altivista—City receives bids until March 3 for construction of filtration and pumping plant for municipal water works and for water and sewer mains in the town; work includes 650 ft. of 12-in. cast iron gravity main; concrete and brick building for the plant; one 30,000 gal. steel wash water tank; 6500 ft. of 8-in. cast iron force main; 50,000 gal. steel standpipe; two low service and 2 high service centrifugal pumps each 700 g.p.m.; 2 electric motors with wiring and appurtenances; one semi Diesel fuel oil engine not less than 125 h.p., considerable amount of cast iron service main from 4 to 10-in.; considerable amount of sewer main from 6 to 12-in.; all necessary filter equipment for two 500,000 gal. units; W. S. Corbin, Chmn. Water Comm.; The Ambler Engineering Co., Engr., Richmond, Va.

Va., Norfolk—City Council approved expenditure of \$220,000 for extending water mains from city to Virginia Beach. (Lately noted.)

Va., Wise—Town Council will petition Circuit Court to call election for bond issue not to exceed \$135,000 for construction of water system. (Lately noted.)

W. Va., Fairmont—Rust Engineering Co., Pittsburgh, Pa., was awarded contract at \$124,473 for constructing water filtration plant; Robert Filter Manufacturing Corp., Philadelphia, Pa., was awarded contract for filtration equipments. (Lately noted.)

### Woodworking Plants

Ala., Tuscaloosa—Oak City Furniture Co. will erect hardwood dry kiln and an addition to main building, estimated cost \$7000; manufacture chifferobes and dresserobes.

Ark., Buffalo—T. W. Boswell Stave Co., T. W. Boswell, Owner, is installing additional stave mill, construction by owner; machinery all purchased. (Lately noted.)

Fla., Tampa—Florida-West Indies Corp., capital \$3,000,000, chartered with W. F. Miller, Pres.; Geo. M. Smith, Sec.-Treas.

La., Plaquemine—Plaquemine Box & Veneer Co., R. I. Schwing, Pres., will establish plant for the manufacture of veneered lumber used for furniture and box shooks; daily capacity of veneer mill 15,000 ft. and box department about 20,000 ft. lumber daily.

Miss., Pascagoula — Wood Novelties — Grubbs Manufacturing Co., capital \$10,000, incorporated by C. W. Grubbs, W. F. Martin and others.

N. C., Kirtell—Continental Plant Co. will rebuild plant (lately noted burned at loss of \$50,000) building to be about 80x150-ft., 1 and 2 stories, fireproof construction; estimated cost \$25,000. (See Machinery Wanted—Building Materials.)

N. C., Toccoa—A. E. Allison and Sons of High Point, N. C. have acquired plant of

Georgia Furniture Co., will continue existing business.

Tenn., McMinnville—Lively Furniture Co., increase capital from \$10,000 to \$15,000.

Tex., Fort Worth—Tarrant County Phonograph Co., capital \$24,000, incorporated by A. H. Curry, O. G. Feltner and others.

Tex., Lufkin—Martin Wagon Co., J. W. Lewis, Sec., increased capital from \$175,000 to \$300,000.

Tex., Sherman—Sherman Sash & Door Co., capital \$30,000, incorporated by D. B. Lyon, R. A. Baxter and others.

### FIRE DAMAGE

Ala., Albertville—Albertville Hotel; loss not estimated.

Ala., Albany—R. G. Cortner's residence on Grant St.

Ala., Headland—Public school building. Address Henry County Board of Education, Abbeville, Ala.

Ark., Eldorado—Dwelling and barn 4 miles south of Eldorado, in charge of J. C. Elliott, Administrator.

Ark., Little Rock—T. A. Darragh's residence on Hot Springs Pike, about 5 miles from Dallas; loss \$15,000 to \$20,000.

Ark., Little Rock—Warehouse of Manufacturers' Furniture Co., Thos. G. Jacobs, Pres.; loss over \$100,000.

Ark., Magnolia—Columbia Cotton Oil Co.; loss \$125,000.

Ala., Mooresville—Frank Richardson's residence.

Ark., Tyroneza—Residence of Joe Stewart, Mgr., Dixie Margarine Co., Union Ave., Memphis, Tenn.; loss \$11,000.

Ark., Wilmar—Wilmar Merchandise Co.; loss \$60,000.

Ga., Atlanta—Barn building on Fair St., owned by A. M. Warren Coal Co.; estimated loss \$20,000.

Ga., Tifton — Whitley Bros. Department Store, Pinkston Drug Store, Chestnut & Williams Meat Market & Grocery and 7 offices, all in Whitley Bldg.; loss \$75,000 to \$100,000.

Ky., Georgetown — Penn., Lumber Co.'s lumber yard, mill and office buildings; loss \$70,000.

Ky., Louisville—Mengel Co.'s veneer plant, loss \$800,000.

Ky., Shelbyville — International Planters Co-Operative redrying plant; J. Harpating Prize room; loss \$500,000, buildings owned by J. B. Turner.

Md., Whiteford—The Galbreath creamery owned by J. W. Crowley, loss \$9000.

Mo., Sollys—Grover C. Tofts' residence; loss \$10,000; present address, 1714 Light St., Baltimore, Md.

N. C., Chapel Hill—Pickwick Motion Picture Theatre and Kelly's Pressing Club owned by S. J. Brockwell; loss \$35,000.

N. C., Gastonia—Spencer Lumber Co.'s plant, loss \$75,000.

N. C., Henderson—Buildings of Henderson Cotton Seed Oil Co.; estimated loss \$150,000.

N. C., Hendersonville—Freeman Hall at Fruitland Institute; loss \$10,000; address N. A. Melton, principal.

S. C., Long Creek—Boys' Home of Long Creek Academy. Address Prof. L. H. Raines.

S. C., Mountain Rest—Dormitory of Long Creek Academy. Address The President.

S. C., Sumter — L. S. Linder's residence and 2 additional buildings; loss \$25,000.



S. C., Westminster—Dormitory of Long Creek Baptist Academy.

Tenn., Chattanooga — Chester Watkins' residence on Lookout Mountain.

Tenn., Clifton — Tobe Garrett's residence at Indian Creek.

Tenn., Columbia — Harry Kleopfer's residence on S. Main St., owned by Frank Willsford.

Tenn., Englewood — High and grammar school buildings.

Tenn., Sweetwater—Berman Department Store owned by E. L. Frost; loss exceeds \$25,000.

Tenn., Sweetwater — Sweetwater Valley Packing Co.'s plant on First St.; loss approximately \$20,000; building owned by Eli Cleveland.

Tex., Alvord—Speer Dry Goods Store and West Magers Grocery store owned by Mrs. Terrel Collins; Alvord Pharmacy; R. T. Howard's store and City Bakery owned by Misses Margaret and Willie Proctor; total loss \$85,000.

Tex., Garrison — Two dwellings owned by Miss Eli Nall.

Tex., Houston—Rollaway Skating Rink, loss \$25,000.

Tex., Mildred — Will Clement's gin, loss \$12,000.

Tex., Paint Rock—High School building; loss \$20,000; address Concho County Board of Education.

Tex., Vernon — Dixon Dry Goods Store south to walls of Waggoner National Bank Bldg. loss \$200,000.

Tex., Walnut Springs—Carlton Bros. & Co.'s store; J. A. Cole's store; loss \$95,000; owned by Henry Mitchell of Wheelock, and J. F. Morris.

W. Va., Arcola — Smoot Lumber Co.'s plant; loss \$50,000.

W. Va., Charleston—Watts Top & Paint Co., C. H. Morday, owner; Sam Baller's barber and tailor shop; O. D. Watt's Paint Shop; Mass & Cartes grocery store owned by Sam Baller; W. Va. Body factory owned by C. H. Morday; H. M. West Store owned by R. D. Epling; total loss \$24,600.

will remodel interior of building, Commerce and Jefferson Sts.; cost \$15,000; Herbert S. Green, Archt., Alamo National Bldg. Bldg., is receiving bids.

Tex., San Antonio—San Antonio Builders' Exchange selected Geo. Willis, Chandler Bldg., San Antonio, as architect for \$170,000 building, St. Marys and Pecan Sts.; 8 stories, brick with stone trim, reinforced concrete frame and basement.

W. Va., Fairmont—National Bank of Fairmont, Brooks Fleming, Jr., Pres., may remodel bank and rearrange fixtures.

W. Va., Wayne—People's State Bank, Fisher F. Scaggs, Pres., organized with \$50,000 capital and will start construction of building about March 15; install 2 vaults in solicits bids from contractors.

## Churches

Ala., Andalusia — Methodist Episcopal Church, South, plans to erect building. Address The Pastor.

Ala., Brewton—Methodist Episcopal Church South, plans to erect Sunday school building. Address The Pastor.

Ala., Grove Hill—Baptist Church plans to erect building; plans drawn. Address The Pastor.

Ala., Millport—Methodist Church plans to erect building. Address The Pastor.

Ala., Selma—St. Pauls Episcopal Church will probably soon start work on \$50,000 parish house; Frank Lockwood, Archt., Montgomery, Ala.

Ala., Whistler — Methodist Episcopal Church, South, plans to erect Sunday school building. Address The Pastor.

Ga., Atlanta—St. Luke's Episcopal Church has approved plans by Marye, Alger & Alger, Atlanta, for erection of \$40,000 church school-parish house on Courtland St. in rear of present structure; brick, 52-ft. frontage; will remodel basement of present building. (Lately noted.)

Ga., College Park—Methodist Church plans to start construction immediately on \$40,000 building. Address The Pastor.

La., Sibley—Methodist Church is considering erection of building. Address The Pastor.

Md., Baltimore—Third Church of Christ, Scientist, G. H. Carl, Treas., 11 E. Lexington St., purchased building at 702 Cathedral St. and expects to select architect within 2 weeks for remodeling present structure and erection of addition.

Md., Cumberland—St. Luke's Lutheran Church, J. William Smith, Chmn. Bldg. Comm., plans to erect church and parsonage; cost \$175,000.

Mo., Mexico—Baptist Church will erect \$80,000 building; Ben C. Ellicott, Archt., Mexico.

Mo., Metz—Methodist Episcopal Church, South, plans to erect building; Rev. Ira Selby, Pastor.

N. C., High Point—Wesley Memorial Church will erect \$100,000 Sunday school addition. Address The Pastor.

N. C., Winston-Salem—Central Terrace Methodist Church, Sprague St., Rev. J. A. J. Farrington, Pastor, will erect \$50,000 building; plans to be prepared by Dr. J. A. Baylor, Archt., Board of Extension of M. E. Church, South, Louisville, Ky.

Okla., Hobart—Christian Church plans to rebuild burned structure. Address The Pastor.

Okla., Madill—Baptist Church will erect \$30,000 building; finishing plans. Address The Pastor.

S. C., Aiken—First Presbyterian Church plans to erect \$35,000 building on site of present structure. Address The Pastor.

# BUILDING NEWS

## BUILDINGS PROPOSED

### Association and Fraternal

Ala., Ensley — Benevolent Protective Order of Elks plans to erect \$30,000 building during 1924.

Fla., Fort Myers — Fort Myers Lodge No. 1288, B.P.O.E., will probably start work within 60 days on erection of \$50,000 Spanish type building, 1st St. and Royal Palm Ave.; 2 stories, 100 x 46 ft., brick or stucco; bowling alleys, pool and billiard rooms, dining room and kitchen, lockers, showers, etc. (Lately noted.)

La., Baton Rouge — Aerie of Eagles plans to erect \$75,000 lodge building, North Boulevard near post office; 3 stories, natatorium, gymnasium, bowling alleys, dance hall, etc.; lodge room on third floor.

Okla., Marlow — Ancient Free and Accepted Masons purchased 50-ft. site on N. Broadway and plan to erect temple.

Tex., Dallas—Dallas Lodge No. 44, I. O. O. F., Sherman C. Reed, Chmn. Bldg. Comm., is receiving bids for erection of 2-story building, Young and Pearl Sts.; stores on first floor, lodge rooms above; Arthur A. Brown, Archt., Dallas.

Tex., Houston—Knights of Columbus, H. C. Schumacher, Pres., Bldg. Comm., selected Maurice Sullivan, Houston, as architect for \$250,000 building to be erected at Walker Ave. and Crawford St.; 5 stories and basement. (Lately noted.)

Tex., Lockhart — Ancient Free and Accepted Masons plan to erect \$50,000 building on S. Main St.

Tex., Sherman—Travis Lodge No. 117, A. F. & A. M., Will Leslie, Chmn. Bldg. Comm., will receive bids until Feb. 25 for erection of Masonic Temple on Lamar St.; 50x95 ft., 3 stories, concrete, brick, steel and wood construction, 5-ply built-up roof, concrete foundation, metal lath, ventilators, steel sash and trim, wire glass, stone; John Tullock and Clyde & Rolfe, Archts., Sherman. (Lately noted.)

Va., Norton—R. B. Alsover, Big Stone Gap, Va., is chairman of Finance Comm., to erect \$75,000 Masonic Temple.

W. Va., Fairmont—Benevolent Protective Order of Elks will erect \$300,000 building on Adams St.; ballroom with stage, dress-

ing room and balcony, lodge rooms, 74 bedrooms, etc.; cold storage, boiler and locker rooms, etc. in basement; install fireproof vault; John C. Burchinal, Jr., Archt., Fairmont.

### Bank and Office

Fla., Orlando—L. C. Townsend Co. has permit to wreck frame building, Pine and Court Sts.; 3-story steel and brick store and office building will be erected on site.

Fla., Tampa—B. C. Fonfoey, Archt., Tampa, has plans and specifications completed for Tampa Tribune 12-story office building and solicits bids from contractors qualified to handle contract of that magnitude.

La., New Orleans—Parke-Davis Co. is receiving bids for furnishing and driving piles for foundation of 4-story addition to office building, Camp St. and Howard Ave.; 105x125 ft.; Moise H. Goldstein, Archt., Hibernia Bank Bldg.; following contractors estimating: L. M. Dalgarn; J. E. Hemmingway; Hampton Reynolds; Wm. Wren; Geo. J. Glover, O. M. Gwin; John Riess; Doullut & Williams, Inc., all New Orleans. (Previously noted under Stores.)

Md., Baltimore—Chesapeake Bank, J. Monroe Holland, Pres., will enlarge building, North Ave. and Ellamont St., cost \$50,000; also plans to establish branch in down town section.

Md., Baltimore—Excello Illuminating Co., 312 N. Eutaw St. will erect store and office building at 411 N. Howard St.; cost \$100,000, brick, steel and stone, 3 stories and basement; Stanislaus Russell, Archt., 11 E. Lexington St., Baltimore.

Tex., Austin—W. T. Caswell, S15 Littlefield Bldg., is having plans prepared by Sanguinet, Staats & Hedrick, Fort Worth, Tex., for erection of 13-story brick and stone office building, W. 7th and Colorado Sts. (Lately noted.)

Tex., Robstown—W. H. Daimwood will expend \$30,000 to remodel Daimwood Bldg.; 2 stories, 50x100 ft., brick construction, tile and wood floors, concrete foundation, composition roof; install vaults and vault lights; Wm. Ward Watkins, Archt., Scanlon Bldg., Houston, Tex. (Lately noted.)

Tex., San Antonio—Alamo National Bank

S. C., Williston—Baptist Church, Rev. W. R. Davis, Pastor, plans to erect brick building; install pipe organ; 28 classrooms, dining room, kitchen, etc.

Tenn., Chattanooga—McFerrin's Chapel, M. E. Church, South, east of Missionary Ridge, Rev. W. B. Peck, Pastor, plans to erect building.

Tenn., La Follette—First Baptist Church, Rev. D. B. Bowers, Pastor, plans to erect \$40,000 to \$50,000 building.

Tex., Cross Plains—First Methodist Church, T. W. Anderson, Chmn. Bldg. Comm., will erect \$20,000 brick building.

Tex., Cuero — Methodist Church will erect Sunday school addition; Beverly W. Spillman, Archt., Alamo National Bank Bldg., San Antonio, Tex.

Tex., Dallas—Dr. Hubert D. Knickerbocker, Presiding Elder, Dallas Dist., M. E. Church, South, Bishop Jas. Cannon, Dr. F. F. Onderdonk and R. L. Russell are interested in erection of \$10,000 brick church for Mexicans of Dallas.

Tex., Dallas—First Methodist Church, M. C. Cameron, Chmn. Bldg. Comm., has instructed R. H. Hunt Company, Dallas, to proceed with plans for erection of \$900,000 building at Ross Ave. and Harwood St., portion of foundation completed and contract for additional excavation and foundation of 4-story Sunday school section will be let at once; main auditorium to seat 2500, Sunday school assembly hall to seat 3500. (Previously noted.)

Tex., Dallas—Pentacostal Temple, 4th and Grand Aves., East Dallas, Rev. N. F. Eby, Pastor, plans to erect \$30,000 stone building, Peak St. and Garland Ave., East Dallas.

Tex., Fort Worth—Broadway Presbyterian Church plans to erect Sunday school building; W. Q. Kuykendall and D. A. Cowan, members of Finance Comm.

Tex., Fort Worth—North Fort Worth Baptist Church, Rev. W. W. Rivers, Pastor, plans to erect \$75,000 building.

Tex., Grapeland—Methodist Church is having plans prepared by C. H. Lienbach, Dallas, Tex., for erection of 2-story brick and stone building. (Lately noted.)

Tex., Hillsboro — Central Presbyterian Church will receive bids until March 12 for erection of 3-story concrete and brick building; 3 stories, 55x97 ft., concrete, pine and hardwood floors, concrete foundation, glazed tile roof, interior tile, ventilators, cut stone, art glass, Celotex (plaster board); plans on file at office Texas Contractor, Dallas, Tex., and C. H. Ruebeck, Waco, Tex., and may be had from Paul G. Silber & Co., Archts., Bedell Bldg., San Antonio; separate bids for forced hot air heating, conduit wiring and plumbing. Address W. C. Wear, Chmn., Hillsboro, or Archts. (Previously noted.)

Tex., Robstown—First Methodist Church has plans under way by Morris & Noonan, 6th floor, Houston Bldg., San Antonio, Tex., for erection of church and Sunday school building; semi-fireproof, reinforced concrete frame, brick and stone construction, part basement; cost \$50,000.

Tex., San Antonio — South Side Christian Church has plans ready for bids on erection of addition to building, S. Presa St. and Dunning Ave.; Adams & Adams, Archts., Gibbs Bldg., San Antonio.

W. Va., Clarksburg—Church of Immaculate Conception, Rev. P. H. McDermott, Pastor, 126 E. Pike St., will receive bids until March 3 for construction of church building; plans and specifications from Edw. J. Weber, Archt., Knights of Columbus Bldg., 236 Fourth Ave., Pittsburgh, Pa.

W. Va., Spencer—Methodist Protestant

Church plans to erect \$50,000 building; M. F. Llewellyn, Chmn. Bldg. Comm.

W. Va., Williamsport—United Brethren Church plans to erect Sunday school addition. Address The Pastor.

### City and County

D. C., Washington — Library — District Commrs., Room 509, District Bldg., will receive bids until March 4 for construction of Mount Pleasant Branch Library Building; for information apply to Room 427, District Bldg.

Fla., Clearwater — Courthouse Addition — Pinellas County Comm. is considering erection of 40 x 40 ft. addition.

Md., Baltimore—Bath and Field House—Board of Awards, Mayor Howard W. Jackson, Pres., will receive bids until Feb. 27 for furnishing all materials and doing all work necessary to complete structure for bath and field house at Druid Hill Park; drawings and specifications from Park Office, Gay and Lexington Sts.; Josias Pennington and Pleasants Pennington, Archts., Professional Bldg., Baltimore. (Lately noted.)

Md., Baltimore—Municipal Heating Plant—City, Mayor Howard W. Jackson, Mayor, selected Wm. F. Stone, Jr., Munsey Bldg., Baltimore, as architect for \$250,000 municipal heating plant to serve City Hall, Court House, War Memorial Bldg., Park and Fire Boards Bldg. and other city structures if necessary.

Md., Baltimore—Police Building—City, Howard W. Jackson, Mayor, selected Josias Pennington, Professional Bldg., Baltimore, as architect for \$1,000,000 police administration building, Fallway and Lexington St., east of War Memorial Bldg. (Lately noted.)

Miss., Charleston—Courthouse—Mississippi County will vote Aug. 9 on \$40,000 courthouse bonds. Address County Commrs.

Miss., Forest—Courthouse—Scott County Board of Supervisors will borrow \$50,000 to build and equip courthouse.

N. C., Charlotte—City Hall—City, J. O. Walker, Mayor, has selected C. C. Hook and Louis D. Southerland, both Charlotte, as architects for city hall building to be erected on square bounded by East Ave., Davidson, 4th and Alexander Sts. (Lately noted.)

N. C., Durham—Home—Durham County, C. M. Euler, Mgr., is having plans completed by G. Murray Nelson, Raleigh, N. C., and Durham, for erection of \$100,000 building for county home. (Previously noted.)

N. C., Webster—Jackson County is having plans prepared by C. H. Chunn, West Asheville, N. C., for erection of \$20,000 to \$25,000 brick veneer county home building on county farm near Webster, lately noted; 1 and 2 stories, 180x36 ft., concrete foundation. Address Raymond R. Nicholson, Register of Deeds, Sylva, N. C. (See Mch. Wanted Building Material; Heating Plant.)

Tex., Corsicana—Memorial Building—American Legion, Fred M. Seale, Comdr., is interested in erection of memorial building for Navarro County; auditorium to seat 2500.

Tex., Crockett—Auditorium—City will erect 2 story city auditorium; 1½ stories, theater to seat 1000 on first floor, offices above. Address The Mayor.

Tex., Houston Heights (Branch Houston)—Community House—J. G. Donovan is chairman of comm. interested in erection of Spanish type community house and gymnasium; 2 stories, 60x120 ft.; offices, reading rooms, auditorium to seat 2000, stage equipment, shower baths, etc.; cost \$12,000.

Tex., Palestine—Remodeling—Anderson County, Mr. Campbell, County Auditor, is receiving bids to remodel jail.

Tex., Tyler—Auditorium—City Commrs. are considering remodeling part of city hall for auditorium; J. H. Bothwell, Archt., Tyler.

W. Va., Martinsburg—Fire Station—Ryneal Hose Co. No. 1 plans to start construction next month of \$20,000 fire station, probably by day labor; building to be 2 stories, 37x67 ft., brick; C. E. Kent, Archt., Martinsburg. (Previously noted.)

### Dwellings

Fla., Miami Beach—D. T. Rainey is receiving bids for erection of \$15,000 residence, N. W. 17th St. and N. W. South River Drive; 2 stories, concrete, tile and stucco construction; 3-car garage and servants' quarters in rear; August Geiger, Archt., Miami.

Fla., Pensacola—Leighton I. Turner, Escanaba, Mich., purchased waterfront site at Innerarity Point on Perdido Bay and plans to erect lodge.

Fla., Tampa—Alex. M. Cornwell, vice-pres., Oldsmar Land Development Co., will erect \$501,000 residence.

Fla., Miami—H. B. Foster purchased site in Riviera and will erect residence.

Fla., Miami—E. A. Kelly purchased site in Riviera and plans to erect residence.

Fla., Miami—D. B. Roberts, Hartford, Conn., purchased site on Hibiscus Island and plans to erect residence.

Fla., Miami—H. J. Sanborn purchased site in Riviera and will probably erect residence.

Fla., Pablo Beach—Earl Iwanowski and C. E. Oestreich will erect two 6-room bungalows on Suskind Ave.; have called for bids.

Fla., Tampa—Col. J. I. Chamberlin, Resident Archt., Oldsmar, Tampa, will erect residence; plans by owner.

Fla., Tampa—C. P. Bland, care Oldsmar Land Development Co., will erect Spanish type residence in Oldsmar; Col. J. I. Chamberlin, Archt., Oldsmar, Tampa.

Fla., Tampa—Geo. E. Cornwell, care Oldsmar Development Co., will erect 30 dwellings at Oldsmar, Tampa.

Fla., Tampa—H. T. Hancock, care Oldsmar Land Development Co., will erect residence in block 5, Oldsmar.

Ga., Savannah — Thos. Hilton will erect Spanish type villa, 45th and Atlantic Aves., Chatham Crescent.

Ga., Savannah — Dr. A. J. Waring plans to erect residence, 45th and Atlantic Aves.

Ky., Ajax (P. O. Bulan, Ky.) — Ajax Coal Co., will erect 12 miners' dwellings.

Ky., Lothar — P. L. Simpson will erect \$10,000 residence; contract at once.

Ky., Whitesburg — George Hogg will erect several dwellings; contract at once.

Md., Baltimore—Frank E. Bailey, 5517 Ethelbert Ave., will erect cottage on Park Heights Ave. near Division Lane.

Md., Baltimore—Modern Realty Corp. will erect \$20,000 two-story brick dwelling, Dalrymple Ave. east of Granada Ave.; 22x34 ft.

Md., Baltimore—Ralph Blum purchased site on St. George Ave. south of Beaumont Ave., Govans, and will erect 8-room frame dwelling.

Md., Baltimore—C. Frederick Hutchinson, 5 S. Howard St., purchased site, north side Poplar Hill Rd. west of Roland Ave., and is reported to erect \$15,000 residence.

Md., Baltimore—Wise Construction Co. will erect 3 frame cottages S. E. cor. Manhattan and Rusk Aves.; 1½ stories, 28x30x24 ft.; total cost \$14,000.

Md., Baltimore—W. J. McKenna will erect 2½-story frame residence, Copley Rd. near



Asburton Ave.; cost \$18,000; Geo. Wessel, Archt., 3001 Lyttleton Rd., Baltimore.

Miss., Meridian—First Baptist Church, Rev. L. R. Christie, Pastor, will rebuild parsonage lately noted burned at \$15,000 loss; details not arranged.

Mo., Independence—John Fassnacht will erect bungalow at 210 N. Union St.

Mo., Nevada—L. R. Fryer will erect 2 bungalows.

Mo., Springfield—J. W. Irby will erect residence in 900 block N. Robberson St.

Mo., Springfield—J. A. Riley will erect 3 dwellings on N. Douglas St.

N. C., Belmont—S. P. Stowe will rebuild residence lately noted burned at \$100,000 loss and will probably let contract in near future; White, Streeter & Chamberlain, Archts., Gastonia, N. C.

North Carolina—Coast Guard Headquarters, Darby Bldg., Washington D. C., will receive bids until Feb. 29 for construction of frame dwelling with concrete cellar and alterations to other buildings at Bodie Island Coast Guard Station, N. C.; dwelling to be 2 stories, 26x40 ft., maple floors, asbestos or asphalt slate covered or wood roof, 2 baths, hot water heat, electric lights and generating plant, information upon application from Supt., 7th. Dist. Coast Guard, Field Asst. M. P. Hite, C. & R. U. S. Coast Guard, both Elizabeth City, N. C., or from Coast Guard Headquarters, W. V. E. Jacobs, Capt. U. S. Coast Guard, Act. Commandant. (Lately noted.)

S. C., Gaffney—Donald Huggin will erect five 5- and 6-room dwellings on Lipscomb St., cost \$2500 each, and remodel present dwelling on property.

Tenn., Chattanooga—Chester Watkins will rebuild residence on Lookout Mountain burned at \$20,000 loss.

Tenn., Knoxville—Bruce Keener, Jr., will erect Colonial residence on Kingston Pike near Cherokee Country Club; 2 stories and basement, brick veneer, copper roof.

Tenn., Knoxville—Chas. L. LaRue will erect brick residence off Kingston Pike, Hillvale; 2 stories and basement; A. E. Gredig, Archt., Knoxville.

Tenn., Knoxville—John C. Cruze will begin construction of English type residence in Hillvale about March 1; brick veneer, 1 story and basement; Ryno & Brackney, Archts., Knoxville.

Tex., Fort Worth—M. A. Fuller will erect \$43,000 residence, 6th Ave. and Elizabeth Blvd.; 2 stories, 10 rooms, brick and tile.

Tex., Houston—R. H. Chowning will erect 4 six-room cottages, 6033-37 Victor St.; total cost \$16,000.

Tex., Lufkin—Martin Wagon Co. purchased 53-acre tract and will develop; will erect 25 dwellings.

Tex., San Antonio—Starling Realty Co. will erect 10 dwellings in San Fernando Addition.

Va., Danville—Claude Vaden will erect Spanish type residence on W. Main St.; 8 rooms, stucco, cost \$12,000; bids opened Feb. 20.

W. Va., Martinsburg—M. L. Compton will erect 3 double frame dwellings on Porter Ave.; composition roofs; total cost \$18,000.

### Government and State

Okl., Fort Sill (Ind. Branch Lawton)—Heating Plant—Artillery School of Fire, David Grove, Capt., Q. M. C., plans to expend \$20,000 for heating plant.

W. Va., Charleston—Post Office Annex—Treasury Dept., Jas. A. Wetmore, Act. Super-

vising Archt., Washington, D. C., is reported to be preparing plans for erection of \$20,000 1-story workroom annex to post office; hollow tile and stucco or brick facing; J. A. de Gruyter, Postmaster, Charleston.

### Hospitals, Sanitariums, Etc.

Ala., Montgomery—Anti-Tuberculosis League, Roy M. Thigpen, Sec., plans to erect sanatorium at Fresh Air Camp.

Ga., Macon—Central of Georgia Railway, Dr. Craig Barrow, Ch. Surgeon, Savannah, Ga., is considering erection of hospital; details not decided.

Ga., Thomasville—John F. Archbold, 12 Broadway, New York City, will open bids March 3 at Thomasville for erecting Archbold Memorial Hospital, comprising hospital buildings, nurses' home, heating and refrigerating plant, laundry building, etc.; cost \$1,000,000; bids to be received on 3 fireproof buildings; reinforced concrete skeleton, hollow tile walls, stucco exterior, terra cotta tile roofing; main building, 3 stories and basement, 200-ft. frontage with front wing and service wing in rear; colored building, ell-shape, 90x100 ft., 2 stories; nurses' home, 2 stories, 140x40 ft.; E. C. Wachendorff, Archt., 620 Forsyth Bldg., Atlanta, Ga.; will receive bids on mechanical equipment later; following contractors invited to submit bids; Algernon Blair, Montgomery, Ala.; Foundation Co., Atlanta, Ga., and New York City; Gude & Co.; Southern Ferro Concrete Co., both Atlanta; Turner Construction Co., Atlanta and New York. (Previously noted.)

Ky., Bowling Green—City plans to erect hospital, 8th and Park Sts. Address The Mayor.

Ky., Pikeville—United States Veterans Bureau, Frank T. Hines, Director, Room 791, Arlington Bldg., Washington, D. C., will receive bids until March 11 for construction complete of 1 fireproof hospital building, 1 double officers' quarters of brick and frame construction, 1 brick and frame well house, 1 steel water tank and 1 drilled well at U. S. Veterans Hospital; work includes concrete foundation work, reinforced concrete slab construction, limestone, brick and terra cotta tile work, metal lathing, built-up roofing, slate roofing, cement, mastic, tile and wood flooring, slate and marble work, carpentry, ironwork, interior plastering, interior and exterior painting, glazing, hardware, heating, plumbing and electrical installation, outside service connections and approach work; drawings and specifications from Constr. Div., Room 791, Arlington Bldg.; following contractors estimating: Boyle Robertson Construction Co.; Crane Co., 1221 Eye St., N. W., both Washington, D. C.; A. Stang, 733 Real Estate Trust Bldg., Philadelphia, Pa.; Circle Construction Co., 59 Pearl St., New York City; L. W. Hancock, Louisville, Ky.; Pikeville Supply & Planing Mill Co., Pikeville; Henry Keldel & Co.; Regan Construction Co., 2 E. Lexington St.; Riggs, Distler & Co., Inc., all Baltimore, Md.; Chas. T. Taylor, 17 S. King St., Hampton, Va.; Wm. MacDonald Construction Co., 428 Odd Fellows Bldg.; Dickie Construction Co., Syndicate Trust Bldg., both St. Louis, Mo.; Foster & Creighton Co., Nashville, Tenn.; Algernon Blair, Montgomery, Ala.; Fort Dodge Boiler Works, 311-15 Second Ave., Fort Dodge, Iowa; King Lumber Co., Charlottesville, Va.; Johns-Mansville Co., Inc., 6300 Euclid Ave., Cleveland, O. (Lately noted.)

La., New Orleans—Dr. B. F. Gallant purchased 18-acre site on Henderson Point, Harrison County, Miss., and will establish neurological and general hospital; will use present clubhouse as recreation center and start construction about March 15 on 2 brick and

concrete buildings, one for offices and examination rooms and the other for hospital.

La., New Orleans—Flint-Goodrich Hospital for Negroes, 1556 Canal St., Dr. T. Restin, Health Supt., plans to erect additional buildings.

Tenn., Nashville—Protestant Hospital will erect \$200,000 fireproof addition; 5 stories and basement, fireproof, concrete, stone and brick; mechanical equipment in basement, offices on first floor, 2 floors for patients, surgical rooms and laboratories on top floor; Donald W. Southgate, Archt., Nashville.

Tex., McKinney—City, Tom W. Perkins, Mayor, will erect \$75,000 nurses' home at City Hospital, gift of Fletcher B. Pope; fireproof, reception and lecture halls, library and 25 private rooms; Lang & Wiltchell, Archts., Dallas, Tex.

Tex., Rusk—State Board of Control, S. B. Cowell, Chmn., Austin, Tex., will open bids Feb. 20 for dairy farm, 2 silos and feeding shed for East Texas Hospital for Insane; S. W. Day, Archt., Jacksonville, Tex.

Tex., Snyder—Scurry County is considering calling election on \$50,000 hospital bonds. Address County Commrs.

### Hotels and Apartments

Ala., Huntsville—Jno. J. Bradley contemplates erection of \$20,000 apartment house on Green St.

Fla., Miami—Herman Halladay contemplates erection of duplex apartment house on Park Ave., to contain 2 apartments of 6 rooms and bath each.

Fla., Miami—Logan Billingsley, 1455 Grande conc., New York City, has purchased Lawrence Park and is planning construction of apartments.

Fla., Miami—Mrs. Wm. E. Beck contemplates erection of \$12,000 apartment house on N. W. Seventh Place in Orange Park; 2 stories, cement block.

Fla., St. Petersburg—R. W. Gilmore, C. B. Turner and S. B. Predmore have purchased property on Central St. and contemplate erection of 6-story steel building to include stores on first floor and apartments above; construction about April 1st.

Fla., St. Petersburg—Mrs. A. G. Porter contemplates erection of 125-room hotel at Fourth Ave. and Beach Drive north; each room with private bath or shower; will be named Ferdinand and Isabella.

Ga., Athens—Mrs. L. A. Fowler plans to erect 3-story brick building on Prince Ave.; stores on first floor and apartments above; 2 to 4 rooms and kitchenette; 10 apartments; plans by Wm. J. Miller, Con. Engr., Athens.

Ky., Owensboro—S. R. Ewing and Mike Callas contemplate erection of apartment house on West side Ewings Court to cost between \$75,000 and \$100,000; 3 stories, 4 apartments on each floor to consist of living room, dining room, bed room, kitchenette and bath; 80x80 ft., steam heat, brick construction.

La., New Orleans—Guaranty Development Co., Inc., Granville Sewell, Adv. Mgr., contemplates renovating and reconstructing Bienville Hotel into winter resort hotel.

Md., Baltimore—Royal Realty Corp., Equitable Bldg., has purchased rectory of Emmanuel Protestant Episcopal Church, N. E. cor. Cathedral and Read Sts., and will convert into apartments; alterations to start June 1.

Md., Baltimore—Stuart Olivier, Standard Oil Bldg., has acquired site on Charles St. avenue, and contemplates erection of apart-



ment house; plans by R. E. Lee Taylor of Parker, Thomas & Rice, Archts., Union Trust Bldg., Baltimore, Md.

N. C., Greensboro—A. R. Perkins will erect apartment house at Church St. and East Fisher Ave., to cost \$10,500.

Okla., Newkirk—Adelbert W. Smith, Wichita, Kan., has plans by Ellis Charles, Wichita, for erection of \$75,000 hotel; 3 stories, brick and stone, 40 rooms and provision for additional rooms.

Okla., Tahlequah—Kiwanis Club, J. B. Pearson, Pres., is promoting erection of hotel.

Tex., Beeville—A. V. Schvab contemplates erection of hotel at Cleveland and Washington Sts.; cost \$80,000; 3 stories and basement; 25 rooms with private baths and 25 without; public and private dining rooms; lobby, ladies' parlors, sample rooms, barber shop, steam heat and elevators, 90x138 ft., concrete foundation, fireproof, concrete flooring, metal roofing, hollow tile, interior tile, plaster board, vaults; W. C. Stephenson, Archt., Beeville, Texas. (Lately noted.)

Tex., Houston—Hugh Wilkin will erect 16-room, 4-apartment building at 1001 Bomar St.; cost \$12,500; brick veneer.

Tex., Houston—Lewis Pils has plans by Charles Jones, Houston, for erection of apartment house.

Tex., Stamford—A. C. Cooper contemplates erection of 8 apartment houses in northwest portion of city.

W. Va., Charleston—Dr. Fleetwood Butts contemplates erection of 3-story brick extension to rear part of building on Summers St. frontage; first floor for stores, etc.

W. Va., Huntington—R. Mankin & Co. will erect 24-room brick apartment house at 812 Tenth Ave.; cost \$15,000.

W. Va., Martinsburg—New Hotel Holding Co., B. A. Poland, Sec., 426 W. John St., contemplates erection of 100-room hotel; will be financed by Hockenbury System, Inc.; F. E. Downes, representative, Harrisburg, Pa. (Lately noted.)

### Miscellaneous

Fla., Coconut Grove—Coconut Grove Community Club, W. Heath Proctor, Pres., contemplates erection of club building.

Fla., Fulford-by-the-Sea—Convention Hall, etc.—Florida Cities Finance Co., M. C. Tebbetts, Pres., will develop 575½-acre tract; will probably open bids next year for erection of convention hall to seat 3000, and 2-story fraternal hall; C. E. Merritt, Constr. Engr., Fulford, Fla.

Fla., Pensacola—Board of Governors of Pensacola Country Club, plans to purchase adjoining estate and establish club house and increase golf course.

Ky., Mt. Sterling—Pavilion—Farmers Union Cooperative Sales Co., Dr. W. B. Robinson, Pres., recently incorporated with \$25,000 capital, contemplates erection of sales pavilion.

La., Baton Rouge—D. E. McInnis contemplates erection of \$50,000 building.

N. C., Gastonia—Dr. L. N. Patrick has secured Jenkins property on South Marietta St., and plans to develop within 6 months; will probably erect hotel, hospital or theater.

Md., Arnold—Club House—Severn Country Club, Jas. H. Preston, Munsey Bldg., Geo. W. Hoos, 308 S. Hanover St., of Baltimore, and others, contemplate erection of country club on Severn River; frame construction, 50x70 ft., 2 stories, oak and concrete flooring, slate roofing, concrete foundation, hollow tile, interior tile, plaster board, ven-

tilators, steel sash and trim; verandas, ballroom, pool rooms, lounge, dining rooms, kitchen, locker rooms, showers, bath and boat houses on beach; will be located at "The Pines-on-Severn." Address Percy P. Turner, Archt., 3 E. Lexington St., Baltimore, Md. (Lately noted.)

Md., Gaithersburg—Baltimore Conference of Methodist Episcopal Church South, 410 N. Eutaw St., Baltimore, will break ground soon for first unit of home for aged to cost \$100,000 and accommodate 50 persons; orphanage will be erected later.

Okla., Okmulgee—Resort—Charles E. Douglas contemplates erection of summer resort to cost \$100,000; will include public picnic grounds, swimming pool, dance pavilion with tile floors, motion picture auditorium, etc.

Tenn., Greeneville—W. C. Waddell, R. C. Bird, N. B. Tweed and others contemplate organization of company with \$75,000 capital stock, for erection of auditorium.

Tex., Brady—Hardin & Jones Lumber Co. will erect 2-story brick building.

Tex., Corsicana—Home—Board of Trustees of I. O. O. F. contemplate improvements and additions to cost \$110,000 to Odd Fellows' Home. Address S. P. Spalding, Waxahachie, Tex., member governing board.

Tex., Dallas—Dance Hall—Chain Stores Co. expects work to start within month on 1-story building on Pacific Ave.; will be leased by A. A. Choteau, Jr., as a dance hall.

Tex., San Antonio—George Willis, Archt., Chandler Bldg., opened bids for remodeling and additions to Chandler Home on West French Place; Lon T. Wright & Co., City National Bank Bldg., low bidder on construction at \$43,622; A. H. Shafer, plumbing, heating and electric wiring at \$12,023; both San Antonio; no contract awarded; will consist of addition of about 22 rooms and remodeling of exterior and interior; Mrs. R. S. Ragsdale, Supt. (Lately noted.)

Tex., Waco—Home—Children of Methodist Orphans' Home will raise money for erection of cottage to cost between \$10,000 and \$15,000. Address Dr. J. W. Torbett, Chmn. (Lately noted.)

Va., Norfolk—Casino—Virginia-Carolina Realty Corp., opened bids for erection of casino and amusement center at Virginia Beach; Gooch-William Co. was low bidder at \$69,000; brick and concrete construction; will have bath houses, dining room, and dancing pavilion.

W. Va., Huntington—D. E. Connolly has acquired property on Fourth Ave. and contemplates erection of 3-story brick building to cost \$25,000.

W. Va., Institute—State Board of Control, Jas. S. Lakin, Pres., Charleston, rejected all bids for erection of building at West Virginia School for Colored Deaf and Blind; Wysong & Jones, Archts., Charleston, W. Va., will revise plans and call for new bids. (Lately noted.)

### Railway Stations, Sheds, Etc.

Fla., Orlando—Seaboard Air Line Ry. Co., Chas. R. Capps, Vice-Pres., Norfolk, Va., plans \$100,000 expenditure; will install team tracks on lot recently purchased; also erect freight station.

La., Monroe—Chicago, Rock Island & Pacific Ry. Co., A. T. Hawk, Eng. Bldg., Chicago, Ill., will let contract in 10 days for erection of \$100,000 depot.

Okla., Henryetta—Kansas, Oklahoma & Gulf Ry. Co., G. N. Toops, Ch. Engr., Muskogee, Okla., is reported to contemplate erection of freight station and addition to passenger station.

### Schools

Ala., Attalla—Board of Education, T. S. Williams, Sec., voted \$30,000 bond issue for erection of addition to grammar school building and repairs to present structure; 1-story, brick and concrete, wood flooring, plaster board, cement foundation, composition or sheet iron roofing, 8 additional rooms; Archt. not selected. (Lately noted.)

Ala., Birmingham—Birmingham-Southern College students have started campaign to raise \$25,000 for erection of Y. M. C. A. hut on campus.

Ala., Fairfield—Board of Education has approved plans for erection of grammar school on Burgin site, to cost \$75,000 and contain 12 class rooms, gymnasium, library, dining room, offices, etc.; also plans to erect combination junior and senior high school on site.

Ala., Guntersville—City will soon hold meeting to discuss ways and means of erecting school building. Address Mayor.

Ala., Headland—Henry County Board of Education contemplates rebuilding school building. (Lately noted—destroyed by fire.)

Ala., Parrish—Town voted \$15,000 bond issue for erection of auditorium and additional rooms to high school. Address Walker County Board of Education, Jasper, Ala. (Lately noted.)

Ark., El Dorado—School Board contemplates \$400,000 bond issue during spring for construction of high school building to cost \$300,000 and several ward schools.

Fla., Clearwater—Pinellas County Board of Education will call election about Mar. 18th, to vote \$225,000 bond issue; will be used to complete junior high school, add rooms to other buildings, erect negro school, repair Central Grammar School.

Fla., De Land—Special Tax School District No. 6, will call election Mar. 11th, to vote on \$125,000 bond issue for improvements to school buildings; address Board of Public Instruction, V. W. Gould, Chmn., De Land.

Fla., Kissimmee—Osceola County Board of Education, President Farmer, will call election Mar. 15 to vote on \$100,000 bond issue for erection of high school at Sumner and Beaumont Sts., to contain 12 rooms, auditorium and 2 study halls; and primary school to contain 6 rooms with provision for 6 more and assembly hall. (Lately noted.)

Fla., Miami—Miami School District selected H. H. Mundy, Miami, to prepare plans for erection of junior high school building at Thirty-first and N. E. Fifth Ave.; 3 stories, 33 classrooms. (Lately noted—voted \$350,000 bond issue.)

La., New Orleans—Orleans Parish School Board, Jacob Schlosser, Supt., will open bids Mar. 14th, for erection of Lafayette School at Carrollton and Belfast Aves., to cost \$250,000; 190x244 ft., 3 stories, contain 32 class rooms, fireproof, reinforced concrete faced with brick; E. A. Christy, Archt., New Orleans, La. (Previously noted.)

Fla., Opopka—Orange County Board of Instruction, Orlando may call election on \$25,000 bond issue for erection of addition to high school building.

Ga., Waynesboro—Burke County Board of Education will open bids about Feb. 25th, for erection of 6-room high school building; Scroggs & Ewing, Archts., Lamar Bldg., Augusta, Ga.

La., Eunice—St. Landry County Board of Education, Opelousas, will open bids Feb. 14, for erection of 2-story brick building; 154x189 ft., 26 class rooms and auditorium, tile roofing, cast stone; Herman J. Duncan, Archt., 120 Murray St., Alexandria, La.

La., Natchitoches—State Normal College will open bids Mar. 11 for erection of 1-story brick infirmary building to cost \$18,000; Favrot & Livaudais, Archt., Hibernia Bank Bldg., New Orleans.

La., Rayville—Richland Parish School District rejected all bids for erection of 2-story brick and concrete school building in Mangham School Dist. No. 16; E. E. Carroll, Archt., Pickering, La. (Lately noted.)

Md., Baltimore—Board of Awards, Howard W. Jackson, Pres., will soon ask for estimates for erection of Junior High School building at Gwynn's Falls Park near Frederick Road; cost \$500,000; brick, steel and stone construction; Smith & May, Archts., Calvert Bldg., Baltimore, Md.

Md., Baltimore—Loyola College is having plans prepared by Otto G. Simonson, Inc., Maryland Casualty Tower, Baltimore, for erection of \$125,000 gymnasium, at Evergreen; 2 stories, brick and steel; H. Adams, Engr., Calvert Bldg., Baltimore.

Md., Princess Anne—Somerset County Board of Education, contemplates \$150,000 bond issue for erection of high school building.

Miss., Biloxi—Schools Board will open bids Mar. 10th, for erection of Back Bay and East Howard School buildings. (Lately noted—voted \$110,000 bonds.)

Miss., Hattiesburg—Forrest County Bd. of Education contemplates \$30,000 bond issue for purchasing site and erecting school building and teachers' home.

Miss., Jackson—M. E. Church, South, contemplates erection of \$200,000 dormitory at Mississippi Methodist Orphanage; fireproof, 231x163 ft., reinforced concrete foundation, concrete flooring, concrete roofing, 3 stories with basement, metal ceilings, partitions, ventilators, steel sash and trim, wire glass, metal doors. (Previously noted.)

Miss., Osyka—Claude H. Lindsley, Archt., 50-53 Kress Bldg., Jackson, Miss., is preparing plans for erection of \$30,000 school building; 2 stories and basement; brick; 70x120 ft. Address Pike County Board of Education, Magnolia, Miss.

Miss., Tchula—Citizens voted \$40,000 bond issue for rebuilding high school building recently destroyed by fire. Address Holmes County Board of Education, Lexington, Miss.

Mo., Hannibal—Board of Directors of School District of Hannibal, E. F. Mangels, Clerk, will open bids Feb. 28th, for erection of North School Building; Malcolm S. Martin, Archt., Odd Fellows' Bldg., Hannibal.

Mo., Kansas City—Board of Education has plans by Chas. A. Smith, Kansas City, for erection of Junior Central High School, to cost \$900,000; 368 x 150 ft., reinforced concrete, faced with brick; will accommodate 1500 pupils; auditorium will seat 1700; 2 gymnasiums, swimming pool and 49 rooms for instruction.

Mo., Kansas City—Board of Education is having plans prepared by Chas. A. Smith, Kansas City, for erection of unit for Fairmount school; 2 stories; 6 class rooms; contract in about a month; also preparing plans for addition of 4 rooms and basement to Allen school, 42nd and Summit Sts.; contract in 2 weeks.

Mo., Kirksville—Board of Regents of Northeast State Teachers College has plans in progress for rebuilding library building recently destroyed by fire; cost between \$75,000 and \$100,000.

N. C., Albemarle—School Board, R. L. Smith, Chmn., voted \$200,000 bond issue for erection of high school building.

N. C., Burlington—Board of Education, Chester C. Haworth, Sec., will open bids Feb. 25 for erection of 2 school buildings; plans on file at office of Supt. of City Schools, and Hubert B. Hunter, Archt., High Point, N. C.

N. C., Greensboro—Directors of North Carolina College for Women, J. I. Foust, Pres., will open bids Feb. 26th, for erection of boiler plant; drawings and specifications issued by Clyde R. Place, Con. Engr., 70 East 45th St., and drawn up by Alfred Fellheimer and Stewart Wagner, Archts., 7 East 42nd St., all New York City; plans and specifications on file at office on Consulting Engineer and President of College.

N. C., Greensboro—North Carolina School for Women appointed Mrs. Julius W. Cone, Chmn. of Committee to have charge of campaign to raise \$250,000 for erection of a student-alumnae hall.

N. C., Hendersonville—Home Mission Bd. of Southern Baptist Convention, Rev. Dr. A. E. Brown, Supt., West Asheville contemplates erection of building to replace Freeman Hall, at Fruitland Institute; at least 40 rooms. (Lately noted—destroyed by fire at \$10,000 loss.)

N. C., Davidson—Davidson College has completed campaign for \$600,000 for erection of Chambers Hall; first unit will contain 9 executive offices, 21 class rooms, 10 instructors' offices, book room and faculty room, 3 stories; Northern unit will contain 11 class rooms, 15 offices, 3 departmental libraries, 9 laboratories and stock rooms; central unit will contain auditorium to seat 1200, stage and dressing room; reception room, banquet hall, kitchen and pantries; Henry C. Hibbs, Archt., First National Bank Bldg., Nashville, Tenn. (Lately noted.)

Okla., Mangum—Greer County Board of Education, contemplates erection of school building; 142x80 ft., slate or composition roof, hollow tile, metal ceilings, hardwood floors, wire glass, steel sash and trim; desire bids on central plumbing plant; address Will C. Jones, Mangum. (Lately noted.) (See Machinery Wanted—Heating Plant.)

Okla., Mangum—White Flat and Annie Laurie School Districts have voted \$14,000 bond issue for erection of consolidated high school building. Address Greer County Board of Education.

Okla., Tulsa—School Board, Frank Duncan, Chmn. Building Comm., will hold election Feb. 26th (extended date) to vote on \$2,000,000 bond issue. (Noted Feb. 14 in detail.)

S. C., Columbia—Richland County Board of Education contemplates erection of high school building in Moonville.

S. C., Gaffney—Building Committee of Limestone College, W. C. Hamrick, Chmn., will open bids Mar. 8 for erection of Hamrick Science Hall, Carroll School of Fine Arts and President's home; to cost \$50,000, \$50,000 and \$20,000; 65x100 ft., 65x97 ft., and 40x60 ft.; brick and stone walls; wood, tile, composition and concrete flooring; 2 stories, concrete foundation, slate roofing, hollow tile, interior tile, plaster board, ventilators; plans and specifications may be seen at office of Wilson, Berryman & Kennedy, Archts., Columbia, S. C., and Wilson and Gastonia, N. C.; Builders Exchanges, Columbia, S. C., and Atlanta, Ga.; Chambers of Commerce, Charlotte and Greensboro, N. C.; E. S. Draper, Landscape Archt., Charlotte, N. C. (Lately noted.)

S. C., Greenville—Holmes Bible and Missionary Institute, Rev. Paul F. Beacham, Pres., is having plans prepared by Beacham & Le Grand, Archts., Greenville, for erection of 2-story brick building at Briggs and Bun-

combe Sts.; 50x90 ft., Colonial design, finished in red brick, tile roof and trimmed with white stone, Colonial columns in front of building; ground floor will contain 10 class rooms; second floor will provide church auditorium with seating capacity on 500; construction assisted by students.

S. C., Greenville—North Carolina State College of Agriculture and Engineering contemplates erection of power plant and enlarging textile building; steam plant will have about 1000 H. P. boiler; textile building will be extended 75 ft., and new machinery installed.

S. C., McColl—Marlboro County Board of Education, Bennettsville, contemplates bond issue of \$80,000 or more for erection of high school building.

S. C., Sumter—Board of Trustees, Sumter City Schools, J. A. Mood, Chmn., will open bids Mar. 11 for erection and equipment of Boys' High school, Girls' High school, Negro school and remodeling primary school, separate bids on building construction, heating, ventilating, electrical work and plumbing; concrete foundations; tin, slate and tile roofing; wood, composition, tile and concrete flooring; 2 and 3 stories; brick and stone walls; 212x184 ft., 175x113 ft., 85x69 ft.; hollow tile, interior tile, vaults, ventilators; plans and specifications may be seen at office of Wilson, Berryman & Kennedy, Archts., Columbia, S. C., Wilson and Gastonia, N. C.; Builders Exchanges, Atlanta, Ga., and Columbia, S. C.; Chambers of Commerce, Charlotte and Greensboro, N. C. (Lately noted.)

Tenn., Englewood—Citizens contemplate \$20,000 bond issue for rebuilding high and grammar school recently destroyed by fire. Address McMinn County Board of Education, Athens.

Tenn., Greenville—Greene County Board of Education will hold election May 3, to vote on \$100,000 bond issue for erection of high school building.

Tenn., Nashville—Board of Education, Building Comm., Baxter Cato, Chmn., will open bids Feb. 23rd, for erection of Fehr school building at Fifth Ave. and Garfield St.; brick, stone trimmings; plans and specification may be obtained from Dougherty & Gardner, Archts., 900 Stahlman Bldg., Nashville, Tenn. (Lately noted.)

Tenn., Paris—Paris Special School District, W. N. Porter, Sec. of Board, rejected all bids for erection of addition to Atkins-Porter School.

Tenn., Sevierville—Murphy Collegiate Institute, Building Comm., Cleo Burchfield, Chmn., contemplates erection of girls' dormitory; to contain 45 rooms for students, rooms for teachers, living room, laundry, etc.; McMahon & McMahon, Sevierville, will probably do brick, cement and plaster work; contract not let; Magaziner, Eberhard & Harris, Archts., 603 Chestnut St., Philadelphia, Pa.

Tenn., Sharon—Weakley County Board of Education, Dresden, has plans under way for rebuilding school building recently burned; contemplate bond issue.

Tex., Beaumont—School Board, J. D. Roberts, Pres., contemplates election of \$150,000 bond issue for repairs to all schools, equipping high school with new roof, erection of gymnasium.

Tex., Cooper—Cooper Independent School District, Board of Trustees, voted \$85,000 bond issue for erection of high school building. (Lately noted.)

Tex., Crandall—Crandall Independent School District will call election March 1st,



to vote on \$40,000 bond issue for school improvements. Address Pres., Board of Trustees.

Tex., Dallas—Southern Methodist University has been given \$325,000 by Mr. and Mrs. R. M. McFarlin, for construction of auditorium on campus; R. H. Hunt & Co., Archts., Dallas, Tex.

Tex., Franklin—School Board, Franklin Independent School District, will call election March 10th, to vote on \$50,000 bond issue for erection of school building. Address Pres., Board of Trustees.

Tex., Highland Park—Highland Park Independent School District voted \$100,000 bond issue for erection of brick and concrete school building; address Board of Education.

Tex., Merkel—Merkel Independent School District will open bids after Mar. 15th, for erection of high school building; 2 stories and part basement, cost \$40,000, brick and stone, face brick, stone trim, tar and gravel roof, steam heat, pine finish, pine floors, plaster, plumbing, electric wiring, 55x100 ft.; David S. Castle, Archt., Abilene, Tex. (Lately noted—voted \$40,000 bond issue.)

Tex., Muleshoe—Bailey County Board of Education is having plans prepared by Kerr & Walsh, Amarillo, and will call for bids in about 30 days for erection of brick and frame school building; 60x60 ft., yellow pine and concrete flooring, tar and gravel roof, ventilators, concrete foundation, metal ceilings, ventilators. (Lately noted.)

Tex., Paint Rock—Board of Education will soon select Archt. to prepare plans for construction of school building to replace structure recently destroyed by fire. (Lately noted—fire loss \$16,500.)

Tex., Prairie—Grand Prairie Independent School District voted \$20,000 bond issue for erection of addition to High School building. Address Pres., Board of Trustees.

Tex., Waco—School Board contemplates erection of high school gymnasium and equipping of athletic field near Cameron Park; funds from sale of \$60,000 bond issue.

Va., Covington—School Board, Jas. G. Jeter, Supt., contemplate \$75,000 bond issue for erection of addition to school building.

Va., Parksley—Accomac County Board of Education, Accomac, contemplates erection of \$50,000 school building on present school site.

W. Va., Charleston—School Board, S. E. Weber, Supt., has plans for erection of junior high school building on West Side at Garvin and Charleston Sts.

W. Va., Morgantown—West Virginia University Stadium Corp., selected Osborn Engineering Co., P. P. Evans, Vice-Pres., 7016 Euclid Ave., Cleveland, Ohio, to prepare plans for erection of \$500,000, reinforced concrete stadium; hollow tile, concrete floors, steel sash and trim, wire glass. (Lately noted.)

W. Va., South Charleston (Br. of Charleston)—Board of Education of Loudon District will soon call election to authorize establishing high school building.

### Stores

Ala., Roanoke—J. J. Awbrey Store building recently gutted by fire, is being torn down preparatory to rebuilding; property of W. W. Wood will also be rebuilt.

Fla., Leesburg—Architect McDonough is preparing plans for several business blocks.

Fla., Taveres—Lake Abstract Co. will erect business block on Irma St.

Fla., Mascotte—J. W. Farley will soon

start construction of building in Talbot's sub-division to house drug store, doctor's office and bakery.

Fla., Tavres—Mr. Nickells has purchased property and contemplates erection of store and office building to cost \$10,000.

La., New Orleans—Miller Brothers, 832 Canal St., have leased building at 930 Canal St. and will expend \$20,000 for alterations; will alter front and interior; Weiss & Dreyfous, Archts., Maison-Blanche Bldg., New Orleans. Bids ready in 3 weeks.

La., New Orleans—J. A. M. Wilson has plans by Jones, Roessle, Olschner & Weiner, Maison-Blanche Bldg., New Orleans, and will open bids this week for erection of 2-story store and office building at Oak and Dublin Sts.; 70-ft. square; brick and hollow tile; cost \$25,000; contractors bidding are: F. L. Bixler, J. A. Hasse, Jr., Gervais F. Favrot, Lionel F. Favrot and J. A. Petty. (Lately noted.)

Md., Baltimore—Frank L. Applestein, 224½ W. Baltimore St., contemplates erection of 4 stores with apartments above on Reisterstown Road and Woodland Ave.; brick foundation, brick construction, tin roofing, metal ceilings, hardwood flooring, gas heat. (Lately noted.)

Mo., Kansas City—Jno. L. Woolfork has purchased S. E. cor. 56th St. and Troost Ave., and contemplates erection of 1-story store building.

Mo., Seymour—S. C. Trimble plans to erect 2 brick business buildings on square; construction in spring.

N. C. Durham—H. M. Kramer Tobacco Co., has plans in progress for erection of 2-story brick building on Holland St.; ornamental tile front; 43x93 ft.; construction first of April.

N. C., Greensboro—J. D. Wilkins will erect brick and steel business block on Lee St. to cost \$15,000.

S. C., Greenville—Col. W. H. Keith contemplates erection of 5-story building on North Main St., to be leased by Craig-Rush Furniture Co.; cost of building and lot, \$150,000; 46x100 ft.; brick and steel construction, face brick front; 20-ft. wide court in rear; Beacham & LeGrande, Archts., Greenville.

Tex., Dallas—Albert S. Jackson will soon award contract for erection of 1-story brick building at Main and Crowds Sts.; to cost \$18,000; 100x100 ft.; will be occupied by Overnite Auto Paint Co.; J. A. Pitzinger, Archt., Dallas.

Tex., El Paso—A. Schwartz, president Popular Dry Goods Co., is having plans prepared by Trost & Trost, Archts., El Paso, for remodeling and alterations to Popular

Building; cost between \$35,000 and \$40,000.

Tex., Lockhart—Kreuz Brothers has plans in progress by E. C. Kreisle, Austin, for erection of store building; brick, stone and reinforced concrete frame; 2 stories, 39x90 ft., composition roof, face brick, concrete and composition flooring; cost \$15,000. (Lately noted.)

Tex., San Antonio—Seutter & Simons, Archts., Moore Bldg. has plans for construction of store and apartment building for I. Goodman; 2-story, brick and concrete; cost \$18,000; lower floor for store and upper apartment. Bids opened Feb. 18.

Tex., Sherman—Hall & Hare will probably let contract about Mar. 1, for erection of 1-story brick building on Wall St. to contain 10 apartments for business firms; 45x144 ft., composition, tar and gravel roofing, concrete flooring, metal ceilings, interior tile, ornamental terra cotta; water and gas piping for 10 stores; Clyce & Rolfe, Archt., Sherman, Tex. (Lately noted.)

Tex., Waco—Mayor Ben C. Richards will soon award contract for erection of 2-story building on Franklin St., to be occupied by Lindlof-Sherman Co. and the Cruger Co.; 60x165 ft.

W. Va., Bluefield—Bluefield Hardware Co., E. A. Leonard, Jr., Pres., contemplates erection of 4-story brick addition to building on Bluefield Ave., to cost \$60,000.

W. Va., Charleston—N. Hyder, 701 State St., contemplates erection of 1-story, brick and tile store building; concrete foundation, oak flooring, 32x40 ft., hollow tile, interior tile, metal ceilings, plaster board, ornamental terra cotta.

### Theatres

Fla., Bradentown—J. K. Singletary will let contract in 2 or 3 weeks for erection of theater on west side Pine St., south of Manatee Ave.; main auditorium will seat 900; balcony will accommodate 300; steam heat, tile floors, marble wainscoting, 65x130 ft., fireproof, pressed brick front, hollow tile and stucco, rest rooms and offices for theater administration; will be leased by Sparks Enterprises; Frank L. Winn, Archt., Tampa, Fla.

### Warehouses

La., Monroe—Lincoln Parish Farm Bureau plans erection of storage house and kiln; address S. N. Noble, official of Bureau.

Md., Baltimore—Davison Transfer Co., Isaac Davison, Pres., is receiving bids for erection of 3-story brick addition to plant at 32-34 South Eutaw St., to cost \$75,000; for office and storage purposes; T. E. Davis, Archt., 615 East Fayette St., Baltimore.

## BUILDING CONTRACTS AWARDED

### Bank and Office

Ga., Savannah—Standard Oil Co., Inc., Louisville, Ky., let contract to R. J. Whalley, 37 Victory Drive, Savannah, for erection of reinforced concrete building; 2 stories and basement 60x91 ft., concrete floors and foundation, tile roof, hollow and interior tile, metal ceilings and doors, vaults, vault lights, ventilators, ornamental terra cotta, steel sash and trim; heating and plumbing to Leckinger & Garen; electrical work to Byck Electric Co. at \$3400; sidewalk elevator to Bryant & Co.; painting, T. J. Dooley & Co. at \$2400; all Savannah; plans by E. W. Glossup, Louis-

ville, Ky., Archt.-Engr. for owner. (Lately noted.)

Md., Baltimore—Commonwealth Bank, Howard and Madison Sts., let contract to R. B. Mason, 308 W. Madison St., Baltimore, for remodeling interior of building; cost \$80,000; Jos. Evans Sperry, Archt., Calvert Bldg., Baltimore. (Lately noted.)

Mo., St. Louis—Soulway Realty Co., 12th and Chouteau Sts., will erect \$85,000 brick bank building at same address; 1 story, 50x129 ft., composition roof, steam heat; Klipstein & Rathman, Archts., 1501 Chemical Bldg.; A. H. Hawesler Building & Construc-



tion Co., Contr., 621 Wainwright St., all St. Louis.

Okl., Oklahoma City—Physicians' & Dentists' Building Co., Dr. Jas. S. Pine, member, Board of Directors, 306 Shops Bldg., let contract to Reinhart & Donovan, Oklahoma City, for erection of \$850,000 reinforced concrete and Bedford stone office building, 1st St. and Broadway; 12 stories, 75x140 ft., metallic ceilings, concrete floors, vaults, interior tile, mail chutes, ventilators, wire glass, Otis elevators; heating and plumbing to Crook & McDonnell; Layton, Smith & Forsyth, Archts., Braniff Bldg., all Oklahoma City. (Previously noted.)

S. C., Spartanburg—Flagler Co., Atlanta, Ga., has contract at about \$100,000 for fireproof floors and roofing for Montgomery Building being erected by Montgomery Building Co., Inc.; Lockwood, Greene & Co., Archts.-Engrs., 24 Federal St., Boston, Mass.

Tenn., Coal Creek—First National Bank, J. W. Jarnigan, Pres., will erect \$30,000 brick, concrete and marble building; Victor L. Nicholson, Contr., Knoxville, Tenn.

### Churches

N. C., Charlotte—Goode Construction Co., Charlotte, has contract to erect Sunday school dept. and parsonage as first unit of Moravian Church, Parkwood Place, Myers Park; cost \$15,000, rectangular shape, brick and slate construction, estimate cost \$50,000; Willard C. Northup, Archt., Winston-Salem, N. C. (Previously noted.)

N. C., Pinehurst—Pinehurst Religious Assn. let contract to General Building Co., Boston, Mass., for erection of brick church; 1 story, 40x125 ft., concrete, wood and slate floors, brick foundation, slate roof, marble trim; Hobart Upjohn, Archt., Grand Central New York City; excavation started. (Lately noted.)

S. C., Chester—Methodist Church at Ogdens, near Chester, let contract for erection of building. Address The Pastor.

S. C., Greenville—Holmes Bible School, 254 Briggs Ave., has finished excavation for \$15,000 building on Buncombe St. 1 story and basement, 50x90 ft., brick veneer and hollow tile, concrete floors; Beacham & LeGrand, Archts., Greenville. (Lately noted.)

S. C., Union—Presbyterian Church let contract to Rutherford-Innes Construction Co., Columbia, S. C., for erection of Sunday school buildings; Casey & Fant, Archts., Anderson, S. C.

Tex., Gonzales—Presbyterian Church, T. F. Harwood, Chmn., Bldg. Comm., will erect \$35,000 building; Fred B. Misenhelder, Archt.-Contr., Gonzales.

Va., Roanoke — Calvary Baptist Church, R. Lee Lynn, Chmn., Bldg. Comm., let contract at \$184,000 to J. T. Barbour & Sons, Roanoke, for erection of fireproof white brick building, Campbell Ave. and 6th St., S. W.; about 65 x 115 ft., ordinary construction, concrete and hardwood floors, interior tile, metal ceilings, and doors, vaults, ventilators, Buckingham slate roof, vapor heating plant; main auditorium to seat 1500, Sunday school section, 2000; heating and plumbing to Kennard Pace Co.; Basham Bros. Sheet Metal Co., metal work and roofing, all Roanoke; Johns Manville Co., Philadelphia, Pa., acoustical treatment; H. M. Miller, Archt., 3½ Campbell Ave., N. W., Roanoke. (Previously noted.)

### City and County

Ala., Anniston—Vault and Offices—Calhoun County let contract for vapor system of heat and plumbing to Klepsig Plumbing & Heating

Co.; conduit electrical work to Terrell Electric Co., both Anniston, for erection of \$33,050 fireproof vault and office for Judge of Probate; 1 story and basement 57x57 ft., plastic or cement finish floors, concrete foundation, Barrett 20-yr. roof, hollow tile, ventilators; Lockwood, Poundstone & Billie, Archts., 1112 Wilmer Ave.; Scarborough & Dempsey, Contrs., 15 W. 23rd St., all Anniston. (Lately noted.)

Md., Baltimore — Pavilion — Board of Awards, Mayor Howard W. Jackson, Pres., let contract at \$47,750 to DeCou & Davis, 6 E. Mulberry St., Baltimore, for erection of music pavilion in Patterson Park.

Okl., Wewoka—City Hall-Armory—City let contract to Sherritt & Co., Wewoka, for erection of city hall and armory building. (Lately noted.)

Tenn., Memphis—Stage Equipment—Auditorium-Market House Comm. let contracts to Jas. Alexander Construction Co. for steel framework for stage walls, and to Chickasaw Machine & Foundry Co. for stage lift equipment; both Memphis; total cost about \$38,000; Chas. O. Pfeil and Geo. Awsumb, Archts., 1403 Union & Planters Bank Bldg., Memphis; bids for electrical equipment to be let in about 2 months.

W. Va., Huntington—Remodeling Jail—Cabell County, R. D. Douthat, Clk. of County Court, let contract at \$20,830 to C. Harrison Smith, Huntington, for remodeling, plumbing, electric wiring and painting county jail; Richard M. Bates, Jr., Archt., Huntington; contracts for heating and ventilation to be let next week. (Lately noted.)

### Dwellings

Ala., Alabama City—Kyle Real Estate & Building Co., Gadsden, Ala., let contract for erection of 10 dwellings. (See Contracts Awarded—Ala., Gadsden.)

Ala., Gadsden—Kyle Real Estate & Building Co. let contracts for erection of 15 dwellings in Gadsden and 10 in Alabama City.

Fla., Jacksonville—Mrs. Harriett B. Blabee will erect \$13,000 residence, Oak St. near McDuff St.; 2 stories, brick veneer; A. L. Clayton, Contr., Jacksonville.

Fla., Miami — First Bond & Mortgage Co. of America, 312-15 Congress Bldg., M. R. Howard, Pres., will erect 150 dwellings in Hialeah; total cost \$400,000; Maurice La Paz, Archt.; J. L. Crouse, Contr., both Miami. (Noted Feb. 14)

Fla., Miami Beach—Chas. G. McCutcheon will erect \$11,000 two-story Spanish type tile and concrete residence, Ouimet Ave. and 34th St.; Watson Corp., Contr., Miami Beach.

Fla., Miami Beach—Geo. L. Hasbrouck, 1013 Brickell Ave., let contract to Beach Construction Co., Miami Beach, for erection of residence in Nautilus sub-division; Henry La Pointe, Archt., Miami. (Lately noted.)

Fla., Pablo Beach—J. M. Jeffries let contract for erection of 6-room summer home.

Fla., St. Petersburg—Fuller-Hunter Corp. will erect number of \$10,000 to \$15,000 dwellings in Jungle Terrace; Hennessy & Taylor, St. Petersburg, contrs. for first group.

Fla., St. Petersburg — Mrs. Polly Tillidson, Schooley-Murphy Apts., is erecting \$10,000 residence at Pasadena-on-the-Gulf, St. Petersburg; lighting and plumbing not let; building to be hollow tile and stucco, 2 stories, 50x50 ft., oak and pine floors, concrete foundation, tile and composition roof; Sparklin & Snell, Archts., Snell's Arcade Bldg., St. Petersburg; owner builds. (Lately noted.)

Fla., St. Petersburg — Schooley-Murphy Co. will erect \$14,000 two-story, 8-room hollow tile dwelling at Pasadena; owner builds.

Ga., Augusta—M. C. B. Holley, Augusta, has contract to erect model home in 2300 block McDowell St.; Scroggs & Ewing, Archts., Augusta; materials ordered. (Lately noted.)

Ga., Fort Benning—Wm. McK. Scott, Capt. Q.M.C., Constr. Quartermaster, let contract at \$105,800 to Harrison Construction Co., Petersburg, Va., on Jan. 2 for erection of 7 officers' quarters; brick, hollow tile and stucco, 28x64 ft., 2 stories, concrete and wood floors, concrete foundation, slate roofs; plans by Construction Service, U. S. A., Washington, D. C.; work started. (Previously noted under Buildings Proposed—Government & State.)

Ga., Savannah — W. R. Morrison will erect \$20,000 Spanish renaissance type residence, Estill Ave. and Reynolds St.; 2 stories, brick veneer, red tile roof, 2 baths, sleeping porch, white marble floors in reception hall and porch, hot water heat; garage and servants' quarters; Levy, Clarke & Bergen, Archts.; Olaf Otto, Contr., both Savannah.

La., New Orleans — Mrs. Herman Hugu will erect residence, 1801 S. Gayoso St.; owner builds.

La., New Orleans — Mrs. M. L. Selley will erect residence, Melpomene and Terpsichore Sts.; Cleveland F. Owen, Contr., New Orleans.

Md., Baltimore—Walter G. Leimbach, 7 St. Paul St., let contract to J. S. Downing, Somerset Rd., for erection of \$11,000 residence, south side Northfield Place west of Somerset Rd.; 2½ stories, 40x25 ft., frame, slate roof, hot water heat; plans by Contr. (Lately noted.)

Md., Baltimore—Modern Homes Corp. will erect 8 two-story brick dwellings, S. E. cor. Belair Rd. and Clifftmont Ave., 13 at S. E. cor. Belair Rd. and Longview Ave. and 13 at S. E. cor. Belair Rd. and Mareco Ave.; 15x30 ft., hot air heat; total cost \$100,000; Fredk. E. Beall, Archt., 306 St. Paul St., Baltimore; owner builds. (Lately noted.)

Md., Baltimore—R. & B. Construction Co., will erect 7 two-story brick dwellings, north side Summit Ave. west of Pimlico Rd.; 17x30 ft., slag roofs; total cost \$17,000; Geo. Wessel, Archt., 3001 Lytleton Rd., Baltimore; owner builds.

Md., Baltimore—Anna M. Walthers let contract to John M. Chetelat & Sons for erection of \$10,500 residence N. E. cor. Forest Ave. and Division Lane; 2 stories, 36x49 ft., frame, slate roof, hot water heat; Daniel Chetelat, Archt., 4807 Park Heights Ave., Baltimore. (Lately noted.)

Md., Ellicott City—J. C. Maginnis will rebuild Hazeldene Manor, lately noted burned at \$35,000 loss; 3 stories with 5-story tower, 50x75 ft., hardwood floors, stone foundation, slate roof, interior tile, plaster board, vault lights, ventilators, rolling partitions; Geo. Griffin, Archt., 32 Knickerbocker Bldg., Baltimore; W. F. Thompson, Pfeiffers Corner, Md., Supt. of Constr.

N. C., Gastonia—John L. Beal will erect \$20,000 residence, S. York St. and 6th Ave.; Italian renaissance type, cream pressed brick veneer, mission tile roof, 2 stories and basement, 12 rooms, hot water heat; White, Streeter & Chamberlain, Archts.; C. W. Spencer, Contr., both Gastonia.

S. C., Greenville—S. O. Skelton, 802 Augusta St., will erect 2 dwellings on Augusta St.; cost \$9000 each, 1 and 2 stories, 7 and

8 rooms, brick veneer, oak and concrete floors, concrete foundation, cedar shingle roofs, interior tile; Cox & Hodgkins, Contrs.; S. F. Floyd Plumbing Co., steam heat; P. A. George, electrical work; Edens & Moon, plumbing, all Greenville. (Lately noted.)

Tex., Dallas—E. Perry Burrus will erect \$16,000 residence on Rawlings St.; 2 stories, brick and hollow tile; Sadler & Russell, Archts.; Dolen & Johnson, Contrs., all Dallas.

Tex., Dallas—J. A. Sanders will erect \$15,000 residence on Overhill Drive; 2 stories, brick and stucco; Fooshee & Cheek, Archts.; J. O. Everett, Contr., all Dallas.

Tex., Houston—Dr. S. M. Lister will erect 7-room brick veneer residence, 36 Montrose Blvd.; Geo. T. Broun, Contr., Houston.

Tex., Houston—Geo. W. Dorrance, 410 W. Main St., let contract at \$24,384 to L. J. Scott, care Temple Lumber Co., Houston, for erection of frame, metal lath, plaster and stucco residence, 1604 North Boulevard 2½ stories, 45x68 ft., concrete, oak and rubber tile floors, reinforced concrete foundation, mission tile roof, interior tile; hot water heating and plumbing to C. L. Warren, 305 Hagerman St.; electrical work, Read Electric Co., 715 Capitol Ave.; Jos. W. Northrop, Jr., Archt., 401-03 West Bldg., all Houston. (Lately noted.)

Tex., San Antonio—H. J. Shearer, 157 Magnolia Drive, will erect 12 dwellings on Magnolia Drive; 5 to 6 rooms, frame; total cost \$60,000; owner builds.

Tex., San Antonio—A. M. Delavan let contract to Chas. H. Briant for erection of residence; cost about \$10,000; plumbing and heating to Jud & Ormond; Atlee B. & Robt. M. Ayres, Archts., all San Antonio. (Lately noted.)

Va., Richmond—Davis Brothers, Inc., plan to erect 20 dwellings on 5th Ave., Highland Park; 6 rooms, cost \$5000 each, frame; owners build.

W. Va., Fairmont—West End Improvement Co., R. B. Berry, Engr., has started work on 2 dwellings on Colborn St. and 3 on Sterling Rd., all Sterling Heights; cost \$4000 each. 2 stories, 18x28 ft., yellow pine, oak and concrete floors, concrete block foundations, composition and cedar shingle roofs, steel sash and trim; plumbing not let; lighting by owner; heating to D. L. Shotts; M. A. Watkins & Co., Archts., all Fairmont. (Lately noted.)

### Government and State

Tenn., Memphis—Sub Post Office—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., let contract at \$99,813 to Algernon Blair, Montgomery, Ala., for construction of 1-story brick and concrete building, approximately 138 x 106 ft., for sub post office; ultimate plans reported to call for expenditure of \$750,000. (Previously noted in part.)

Tex., Rosenberg—Post Office—Carl Robinson has contract to erect 60 x 80-ft post office building; hardwood fixtures, 320 lock boxes.

### Hospitals, Sanitariums, Etc

La., Shreveport—Drs. J. A. Hendricks and T. P. Lloyd let contract to Glassell-Wilson Co., Inc., Sinclair Bldg., Shreveport, for erection of 3-story and basement fireproof addition to Highland Sanitarium; Clarence King, Archt., Shreveport. (Previously noted.)

### Hotels and Apartments

Fla., Miami Beach—J. H. Seman of New York City and Miami, let contract to Chas. S. Ewing Construction Co., Miami, to erect 3-story, 18-family apartment building at N. W. cor. Collins Ave. and 28th St.; cost

\$100,000; concrete and tile with stucco exterior finish; roof of variegated colored Spanish tile; Spanish design; Martin L. Hampton, Archt., Miami, Fla.

Mo., St. Louis—Alco Investment Co., 808 Chestnut St., let contract to V. A. Chinberg, 808 Chestnut St., to erect \$35,000, 3-story tenement building at 5050-54 Washington St.; 28x103 ft., brick, tar and gravel roof, steam heat; Oliver J. Popp, Archt., Odd Fellows' Bldg., St. Louis.

Mo., St. Louis—Wm. J. Heckmann, 100 N. 7th St., let contract to Jones Bros., St. Louis, to erect \$14,000, 2-story tenement house at 4605 Pope St.; 34x54 ft., composition roof, hot air heat; Contr. is also Archt.

Tex., Houston—L. Gabert will erect 2-story, 16-apartment building 60 x 96 ft., tar and gravel roof, brick construction, oak and concrete flooring, ornamental terra cotta; concrete foundation; construction by day labor.

Tex., San Antonio—I. N. Bettison, 1145 Russell Place, contemplates erection of \$18,000 apartment house on Lovers Lane; 2 stories; brick, tile and stucco; reinforced concrete frame; private plans. Day labor supervised by owner.

W. Va., Huntington—Arthur S. Emmons will erect a \$250,000 addition to Emmons Apartments at Third Ave. and Twelfth Sts.; foundation laid and steel work will begin Mar. 15; 67x150 ft.; contain 90 apartments; will be named "Emmons, Jr."; Meanor & Handloser, Archts., Huntington. Construction by owner.

### Railway Stations, Sheds, Etc.

Mo., Crane—Missouri Pacific R. R., E. A. Hadley, Ch. Engr., St. Louis, is reported to have awarded contract to Jerome A. Moss, 608 S. Dearborn St., Chicago, Ill., to erect passenger station. (Lately noted.)

### Miscellaneous

La., New Orleans—Louisiana Commission for the Blind awarded contract to O. M. Gwinn Construction Co., Canal-Commercial Bldg., New Orleans, to erect 1-story brick and frame building on Camp St., to cost \$30,000; Emile Weil, Archt., New Orleans; following sub-contracts awarded: Ole K. Olsen, ornamental iron; Lukens Steel Co., structural steel; F. H. Probst, painting; Pittsburgh Plate Glass Co., glazing; Baird & Putfork, plastering; Johns-Manville Co., roofing; Wm. Geary & Son, millwork; Carolina Portland Cement Co., building material; American Brick Co., brick; American Sheet Metal Works, sheet metal work; all New Orleans. (Lately noted.)

La., New Orleans—Paul B. Habans awarded contract to Roupich Construction Co., New Orleans, at \$20,420 to construct Delamore Market at Elysian Fields Ave. and Robertson St.; frame, stucco and brick; E. A. Christy, Archt., New Orleans, La. (Lately noted.)

Tex., Dallas—Athletic Club—Will T. Caswell, 815 Littlefield Bldg., awarded contract to C. W. Moore, Austin, to erect \$250,000 athletic clubhouse building at West 12th St. and West Ave.; frame and stone construction. (Lately noted.)

### Schools

D. C., Washington—District Commissioners, Municipal Bldg., awarded contract to Parsons & Hyman, 816 Fourteenth St., N. W., Washington, D. C., at \$4,780,000 for erection of 20-room Western High School at 35th and Reservoir Sts., N. W.; brick construction, 2 stories, concrete foundation, gypsum roof, hollow tile, interior tile, metal doors, ventilators, wire glass; A. L. Harris, Archt., Municipal Bldg., Washington, D. C. (Lately noted.)

Fla., Fort Pierce—Board of Public Instruction for St. Lucie County, E. E. Smith, Supt., opened bids for erection 1 and 2-story, 23-room school building; J. C. Hanner Construction Co., Orlando, Fla., was low bidder at \$110,000; contract not awarded; tile and brick construction, concrete foundation, wood and concrete flooring, tile and composition roofing, 80 x 300 ft., hollow tile, ventilators; desire bids on electric lighting and heating; J. N. Sherwood, Archt., Miami and Fort Pierce, Fla. (Lately noted.)

La., New Orleans—Orleans Parish School Board awarded contract to O. M. Gwin Construction Co., Canal-Commercial Bldg., New Orleans, at \$195,715, to erect Capdau School at Lotus and Franklin Sts.; 3 stories, fireproof walls, 108x172 ft.; E. A. Christy, Archt., New Orleans; following sub-contracts let: Frank J. Mathews, painting; Lukens Steel Co., structural steel; Ole K. Olsen, ornamental iron; Douglas Electric Construction Co., wiring; Standard Sheet Metal Works, sheet metal work; Joseph Ariatti, tile; National Sash & Door Co., millwork; Stauffer-Eshleman Co., hardware; Pittsburgh Plate Glass Co., glazing; American Brick Co., brick; Peter Judlin, Inc., building material; all New Orleans; Kinnear Manufacturing Co., Columbus, Ohio, rolling steel doors; Appalachian Marble Co., Knoxville, Tenn., marble. (Lately noted.)

La., Shreveport—Caddo Parish School Board, E. W. Jones, Supt., awarded contract to Stewart McGehee, Little Rock, Ark., at \$615,000, to erect \$800,000 high school building; 2 stories, brick and reinforced concrete, fireproof, 50 class rooms; also awarded contract to W. G. Butler, Shreveport, at \$247,000; fireproof stairs and corridors; Edw. F. Neild, Archt., 1206 Merchants Bldg., Shreveport, La. (Lately noted—voted \$1,000,000 bonds.)

Md., Baltimore—Board of Directors of Calvert School awarded contract to Consolidated Engineering Co., 243-69 Calvert Bldg., Baltimore, to erect school building on Fortieth St. near Canterbury Road; will contain class rooms on one floor, theatre gymnasium, child training room, club room, infirmary, cafeteria, open-air theater; brick, tile and stucco construction, wood joists; 1 and 2 stories, 250x130 ft., stone and concrete foundation; wood, cement and concrete flooring; slate roofing, hollow tile, interior tile, vaults, ventilators; Enterprise Steam & Hot Water Heating Co., 619 W. Franklin St., heating; H. E. Crook Co., Inc., 28 Light St., electric lighting; Davis & Boublitz, 904 West 36th St., plumbing; Lawrence Hall Fowler, Archt., 347 N. Charles St., all Baltimore. (Lately noted.)

Mo., Albany—Board of Education awarded contract to Hanon & Rogers, Newton, Iowa, to erect \$100,000 school building; Wm. Cleague, Bethany, Mo., and Albany Hardware Co., Albany, were awarded contract for plumbing and heating, at \$12,000. (Lately noted—voted \$100,000 bonds.)

N. C., Fayetteville—School Board awarded contract to Carolina Construction Co., Hamlet, N. C., at \$72,788, to erect Massey High School building; contain 18 rooms and auditorium; Raleigh Iron Works, Raleigh, heating at \$7365; Bryce Plumbing & Heating Co., Florence, S. C., plumbing at \$2873; Stiles S. Dixon, Archt., Fayetteville, N. C. (Previously noted—voted \$125,000 bonds.)

N. C., High Point—Methodist Protestant College awarded contract to R. K. Stewart & Son, High Point, to erect 2 dormitories; cost about \$235,000; contract includes electrical work plumbing and heating; 2 stories, 62x35 ft.; one containing 107 rooms, for boys; other containing 66 rooms for girls;



Herbert Hunter, Archt., High Point, N. C. (Lately noted.)

N. C., Stokesdale—Guilford County Board of Education awarded contract to J. R. Owens, Greensboro and Asheboro, N. C., at \$34,619.48, to erect high school building; contain 12 class rooms and auditorium; W. C. Northup, Archt., Winston-Salem, N. C. (Lately noted.)

Tenn., Chattanooga—School Board, Fred B. Frazier, Chmn., awarded contract to Rogers & Leventhal, Chattanooga, at \$27,900, to erect addition to East Fifth St. Grammar school; Fred Cantrell Co., heating plant at \$4363; Tom Wilcox Co., plumbing at \$1637.50; W. H. Sears and Percy Shepherd, Archts.; all Chattanooga. (Lately noted.)

Tenn., McKenzie—Building Commission of Cumberland Presbyterian Church awarded contract to Roscoe H. Weltke, Sikeston, Mo., at \$39,665, to erect dormitory on Bethel College campus; S. J. Veltman, Paris, Tenn., plumbing and heating at \$5815; Carter Electric Co., Martin, Tenn., electric work; brick and stone construction; 2 stories and basement.

Tenn., Memphis—School Board awarded contract to B. E. Buffalee, Memphis, to erect concrete brick and tile school building, 176 Wisconsin St.; cost \$48,000.

Tex., Dallas—Southern Methodist University awarded contract to Bellows and McClay, Dallas, at \$99,900, to erect Kirby Hall; 3 stories, 55x121 ft., slate roofing, concrete foundation, reinforced concrete, e. g. pine and oak flooring, hollow tile, interior tile; total cost \$127,045; Kinnison Bros., Dallas, steam heat through tunnel from central plant; Harry Kahn, Dallas, plumbing. (Lately noted.)

Tex., Dallas—Southern Methodist University awarded to Bellows-Maclay Construction Co., Kirby Bldg., Dallas, at \$99,900 to erect 3-story theology building; 120 x 54.10 ft., slate roofing, reinforced concrete on rock foundation, brick walls, stone trim, wall bearing, reinforced concrete and hardware floor-

ing, hollow tile, interior tile; wood, composition finish, terrazzo and tile flooring; Georgian design; J. M. Johnson, electric wiring; Kahn Plumbing Co., plumbing; both Dallas; DeWitt & Lemmon, Archts., Dallas, Texas. (Lately noted.)

W. Va., Maggie—State Board of Control, Jas. S. Lakin, Pres., Charleston, awarded contract to Spencer Brick Co. and M. S. Boggs & Son, Spencer, W. Va., at \$98,064 to erect Industrial School for Colored Boys; 138x45 ft., 3 stories and sub-basement, concrete foundation oak, tile and concrete flooring; slate roof with steel trusses; face brick, Blue Indiana limestone trim construction; Theo. T. Sansbury, Archt., Parkersburg, W. Va. (Lately noted.)

## Stores

La., New Orleans—Parke-Davis & Co., S. G. Steiner, Mgr., awarded contract to O. M. Gwin Construction Co., New Orleans, at \$7000, for furnishing and driving pile foundation for 4-story building at Camp At and Howard Ave.; Moise H. Goldstein, Archt., Hibernia Bank Bldg., New Orleans, La. (Lately noted.)

Mo., St. Louis—B. Lesser, 904 N. 9th St., let contract to H. O. Hirsch & Co., St. Louis, to erect \$80,000, 5-story mercantile building at 704 N. 9th St.; 36x105 ft.; tar and gravel roof, steam heat; E. E. Christopher, Archt., 6025 Etzel St., St. Louis.

Okla., Ponca City—H. F. Harter awarded contract to O. F. Keck, to erect business building on site occupied by Palace Shoe Store, 207 E. Grand St., to cost \$30,000; 2 stories, brick and stone; 25x140 ft.; to be occupied by Woolworth Five & Ten Cent Store and offices. (Lately noted.)

S. C., Gaffney—Dr. J. G. Pittman plans to erect 3-story business building on site of burned Pittman Bldg., on Frederick St.; cost \$10,000; will contain 2 stores and space for heating plant in basement; 2 stores on ground floor; 7 offices on 2nd floor and 1

room for a hall on 3rd floor; L. Baker, Contr., Gaffney.

Tenn., Huntington — U. G. Butler has awarded contract for erection of 2-story brick building on lot adjoining Commercial Bank.

Tenn., Memphis—J. P. Parker will erect 1-story and basement store building on Madison St.; E. T. DePass, Contr., Memphis.

Tex., Cheapside—E. L. Bellinger contemplates erection of 1-story brick store building; 36x60 ft., concrete foundation, concrete floors, metal diamond shaped roofing, metal ceilings, metal doors, ventilators, steel sash and trim, wire glass; day labor. (Lately noted—destroyed by fire at \$20,000 loss). (See Machinery Wanted—Building material.)

Tex., Moore—Ben Duncan, Jr., awarded contract to J. C. Ferguson, San Antonio, to erect store building; 30 x 40 ft., hollow tile and stucco, concrete floors, composition roof; I. Irwin White, Archt., 217 Garza St., San Antonio.

## Warehouses

La., New Orleans—New Orleans Corrugated Box Co., Inc. let contract to Jos. Framherz, New Orleans, to erect warehouse in square, Oleander, Burdette, Lowerline Sts.; cost \$11,500.

La., Shreveport—Glassell-Wilson Co., Inc., Ashton Glasswell, Pres., was awarded contract by Frank Grocery Co., to erect warehouse; mill construction; Clarence King, Architect, Shreveport.

Md., Baltimore—Central Metal & Supply Co., 609 E. Lombard St., awarded contract to Wm. F. Chew & Co., 212 Clay St., Baltimore, to erect 4-story reinforced concrete warehouse at Twentieth and Mace Sts.; cost \$200,000; 90x108 ft.; pipe shed in rear 56x100 ft.; plans by Huldreich Egli, Engr., 425 St. Paul Place, Baltimore, Md.

Tex., Dallas—A. S. Jackson awarded contract to Inge Construction Co., Dallas, at \$14,000 to erect 1-story brick warehouse at Crowds and Main Sts.

# MACHINERY, PROPOSALS AND SUPPLIES WANTED

**Air Compressors.**—Jno. W. Jackson, Palmetto, Fla.—To correspond with manufacturers of or dealers in small air compressors.

**Air Drilling Equipment.**—J. E. Hellmans, 628 Elgin Ave., Muskogee, Okla.—Prices on air drilling equipment for stone quarry.

**Asphalt.**—E. P. Scarborough, Mayor, Coleman, Tex.—Data and prices on asphalt for street paving.

**Asphalt.**—W. S. Eastep, Mayor, Florence, Ala.—Data and prices on asphalt for paving.

**Awning and Doors (Metal).**—See Building Materials.

**Bank Equipment.**—People's State Bank, Fisher F. Scaggs, Pres., Wayne, W. Va.—Banking house fixtures, cages, vault fixtures, safety boxes and burglar proof vault doors.

**Bank Fixtures.**—People's State Bank, Fisher F. Scaggs, Pres., Wayne, W. Va.—See Bank Equipment.

**Barrels (Lime), etc.**—J. E. Hellmans, 628 Elgin Ave., Muskogee, Okla.—Prices and equipment for making lime barrels, headings and hoops.

**Benches (Church).**—Mrs. E. T. Comer, Millhaven, Screven County, Ga.—Prices on second-hand church benches.

**Boat (Power).**—Joseph Stolz & Son, Inc., (Mchy. Dealers) Commerce Ave., Highbridge Station, New York.—One second-hand 65-

ft. power boat with heavy duty gasoline engine of about 75 h.p., boat required for use on the Pacific coast; submit drawings, photographs or specifications in duplicate.

**Boiler and Boiler Feed Pump.**—Mississippi River Comsn., First and Second Dist., Room 1006, McCall Bldg., Memphis, Tenn.—Bids until March 14 to furnish and deliver one horizontal boiler and one boiler feed pump.

**Boiler (Return Tubular).**—City of Enid, Okla., R. T. Williams, Clk. opens bids Feb. 27 for one 150 h. p. return tubular boiler, brick setting with full iron front, no stack, but bricking and steam and water line complete.

**Bottles.**—See Bottling Plant Equipment.

**Bottling Plant Equipment.**—Electrified Water Co., Robert H. Barnes, 200 Greening St., Camden, Ark.—Prices on water coolers, 1 to 5 gal. capacity bottles, filters for 5 gal. bottles, drinking cup and cup vending machines; blue cotton tape seals and labels, aluminum ware; pop bottling machinery; pop bottles; carbonators; bottle washing machines.)

**Brick (Red Face and Kiln Run).**—See Building Materials.

**Brick.**—Raymond R. Nicholson, Register of Deeds, Sylva, N. C.—See Building Material.

**Bridge.**—Baltimore County, Towson, Md.

Details under Construction News—Road and Street Construction.

**Bridge.**—Charleston County Sanitary & Drainage Comn., Charleston, S. C. Details under Construction News—Bridges, Culverts, Viaducts.

**Bridge.**—Harris County, Houston, Tex. Details under Construction News—Road and Street Construction.

**Bridge.**—South Lake Worth Inlet Dist., Lake Worth, Fla.—Details under Construction News—Miscellaneous Construction.

**Building Materials.**—Continental Plant Co., Kittrell, N. C.—Data and prices on materials for 80x150-ft. fireproof, 1 and 2 story building.

**Bulkhead, etc.**—Adams County Board of Supvrs., Natchez, Miss. Details under Construction News—Miscellaneous Construction.

**Carbonators.**—See Bottling Plant Equipment.

**Building Material.**—Raymond R. Nicholson, Register of Deeds, Sylva, N. C.—Brick, lumber, windows, doors and all materials required to erect \$20,000 to \$25,000 county home.

**Building Materials.**—E. L. Bellinger, Cheapside, Tex.—Prices f.o.b. Westhoff, Tex., on following materials: Cement, lime; prepared ingredients for mortar and plaster; red face and kiln run brick; deformed steel bars, 5/8 and 1/2-in.; reinforcing mesh wire; steel ceiling; steel doors and win-



dows; plate glass  $6\frac{1}{2} \times 6\frac{1}{2}$ -ft., and 18-in.  $\times 6\frac{1}{2}$ -ft.; roof ventilators; ventilating panels for steel ceiling; metal awnings; and metal freight doors.

**Cages.**—People's State Bank, Fisher F. Scaggs, Pres., Wayne, W. Va.—See Bank Equipment.

**Card Board Box Machinery.**—C. Marshall Gravatt, Biltmore, N. C.—To correspond with manufacturers of machinery and equipment for making card board boxes.

**Cars (Logging).**—G. H. Dornblazer, Pres., Three Forks Lumber Co., Elkins, W. Va.—Prices on second-hand logging cars.

**Cement.**—See Building Materials.

**Centrifugal Sand Pump and Engine.**—Mississippi River Comsn., First and Second Dist., Room 1006 Memphis, Tenn.—Bids until March 14 to furnish one centrifugal sand pump and engine.

**Concrete Runways, etc.**—Constructing Quartermaster, Fort Sam Houston, Tex.—Bids until Feb. 23 for building approximately 30,000 sq. ft. concrete floors and runways at the San Antonio Air Intermediate Depot, Kelly Field, Tex.

**Copper Wire.**—Erin Utilities Co., Erin, Tenn.—Bids, bulletins, etc. on bare copper wire.

**Corks.**—Electrified Water Co., Robert H. Barnes, 200 Greening St., Camden, Ark.—Prices on corks for water bottling plant.

**Cotton Gins.**—Bensussan & Sides, Salonic, Greece—Data and prices on cotton gins; correspond with manufacturers.

**Crates.**—Electrified Water Co., Robert H. Barnes, 200 Greening St., Camden, Ark.—Prices on crates for water bottling plant.

**Crane (Locomotive).**—Lewter F. Hobbs, (Mchy. Dealers) Norfolk, Va.—To purchase 8 wheel locomotive crane, M. C. B., 15-20 ton, 50 ft. boom, single or double line; nearly new machine.

**Crusher.**—Virginia Engineering Co., 703 Mutual Bldg., Richmond, Va.—Crusher for making chicken grit from marl lime.

**Cups (Drinking).**—See Bottling Plant Equipment.

**Derrick, etc.**—Taylor-Parker Co., Water St. and Commercial Place, Norfolk, Va.—To purchase stiff leg derrick, 5 to 10 ton,  $\frac{1}{4}$  to 1 ton clamshell bucket, prefer motor driven, will consider others, to make complete revolution if possible, for use in Quarry.

**Desks (School).**—Mrs. E. T. Comer, Millhaven, Screven County, Ga.—Prices on second-hand school desks.

**Drainage.**—Comms. of Wayne County Drainage Dist., No. 1, Lagrange, N. C.—Details under Construction News—Drainage and Irrigation.

**Electric-plating Outfit.**—Hee Manufacturing Co., 1205 Fourth National Bank Bldg., Atlanta, Ga.—Prices on electro-plating outfit.

**Elevator (Passenger).**—Head & McMahan, Athens, Ga.—To purchase second-hand passenger elevator, lifting capacity about 1500 lbs. electric, alternating current, 220 volts, car not less than 4x4-ft. or more than 5x5-ft., to be used in 3 story buildings with basement; good condition.

**Engines (Crude Oil).**—Erin Utilities Co., Erin, Tenn.—Bids, bulletins and data on crude oil burning engines.

**Engine.**—Wilson-Hock Co., (Mchy. Dealers) City Point, Va.—Dealers prices on 175 to 250 h.p. heavy duty Corliss engine.

**Ferry Construction.**—Algiers Public Service Co., Inc., R. P. Nolan, Mgr., New Orleans, La.—Details under Construction News—Miscellaneous Construction.

**Fibre (Furniture).**—R. E. Johnson, Box 57, Asheboro, N. C.—To correspond with manufacturers of fibre used for fibre furniture.

**Gate (Automatic Opening).**—Franklin Edwards, Franklin, Va.—To correspond with manufacturers of automatic or self opening farm gate; platform type preferred.

**Generators.**—Wilson-Hock Co., (Mchy. Dealers) City Point, Va.—Dealers prices on 300 KW turbo generator, 30 cycles and 500 KW turbo generator, 60 cycles, 2200 volts, non-condensing.

**Glass (Plate).**—See Building Materials.

**Grade Raising.**—City of Galveston, Tex.—Details under Construction News—Road and Street Construction.

**Hardware.**—Erin Utilities Co., Erin, Tenn.—Bids, bulletins, etc. on galvanized pole line hardware.

**Heating Plant.**—Raymond R. Nicholson, Register of Deeds, Sylva, N. C.—Heating plant for \$20,000 to \$25,000 county home.

**Heating Plant.**—Will C. Jones, Mangum, Okla.—Prices on furnaces for school building.

**Ice Making Machinery.**—T. B. Hillman, Mgr., Chero-Cola Bottling Co., Coeburn, Va.—Prices on ice making machinery.

**Ice Plant.**—Town of Madison, Fla.—Details under Construction News—Ice and Cold Storage Plants.

**Inlet, etc.**—South Lake Worth Inlet Dist., Lake Worth, Fla.—Details under Construction News—Miscellaneous Construction.

**Lime Making Equipment.**—J. E. Hellams, 628 Elgin Ave., Muskogee, Okla.—Prices and equipment for lime kilns, lime barrel staves, heading and horp plants.

**Locomotive.**—G. H. Bornblazer, Pres., Three Forks Lumber Co., Elkins, W. Va.—Prices on second-hand Shay or Climax locomotive.

**Log Loader.**—G. H. Dornblazer, Pres., Three Forks Lumber Co., Elkins, W. Va.—Prices on second-hand log loader.

**Log Road.**—Great Southern Lumber Co., J. H. Cassidy, Asst. General Manager, Bogalusa, La.—Receives bids until March 1 to construct approximately 4 mi. log road, located near Georgetown, Miss.

**Lumber.**—Raymond R. Nicholson, Register of Deeds, Sylva, N. C.—See Building Material.

**Miscellaneous Supplies.**—Mitra Vyaper Mandal, Lahore, India.—To correspond with manufacturers of the following with view to representation; Pharmaceutical machinery, especially machines to make tablets and pills; cycles (cheap grade); electro-surgical and therapeutical apparatus; samples of calendars; labels; pictures; paintings and post cards, and fancy cardboard boxes.

**Miscellaneous Supplies.**—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until Feb. 25 to furnish steel; warehouse trucks; storage batteries; spark plugs; piston rings; turnbuckles; ring bolts; water breakers; ice-cream freezers; anchor and rescue lights; oars and oarlocks; drinking glasses; china, enamel and agateware; tires; rubber boots; jute; petroleum jelly; vermilion; varnish; plaster of paris; wrapping paper, etc. Blank forms and information (Circular 1590) on application to offices of Panama Canal, Asst. Purchasing Agents at Fort Mason, San Francisco, Cal.

**Metal Working Equipment.**—Hee Manufacturing Co., 1205 Fourth National Bank Bldg., Atlanta, Ga.—Prices on machinery for drilling, shearing, punching and bending sheet metal 10 gauge and lighter.

**Painting.**—Board of Awards, F. A. Dol-

field, Register, City Hall, Baltimore, Md.—Bids until Feb. 27 for interior and exterior painting of engine house No. 11 Eastern and Patterson Park Ave.; C. H. Osborne, Inspector of Buildings.

**Paving.**—City of St. Petersburg, Fla.—Details under Construction News—Road and Street Construction.

**Paving, etc.**—City of Troy, Ala.—Details under Construction News—Road and Street Construction.

**Paving.**—City of De Funiak Springs, Fla.—Details under Construction News—Road and Street Construction.

**Paving, etc.**—City of Huntington, W. Va.—Details under Construction News—Road and Street Construction.

**Paving.**—City of Decatur, Ala.—Details under Construction News—Road and Street Construction.

**Paints, etc.**—R. E. Joynson, Box 57, Asheboro, N. C.—To correspond with manufacturers of paints, varnishes and other supplies used in the manufacture of fibre furniture.

**Paving, etc.**—City of Tallahassee, Fla.—Details under Construction News—Road and Street Construction.

**Paving, etc.**—City of Corsicana, Tex.—Details under Construction News—Road and Street Construction.

**Paving.**—Escambia County, Pensacola, Fla.—Details under Construction News—Road and Street Construction.

**Pipe and Fittings.**—Wilson-Hock Co., (Mchy. Dealers) City Point, Va.—Dealers prices on 300 ft. of 8-in. B and S pipe and fittings.

**Planer.**—Taylor-Parker Co., Water St. and Commercial Place, Norfolk, Va.—To purchase medium speed, 4 side planer, similar to No. 55 Glencove; state price and condition.

**Planer and Matcher.**—Lewter F. Hobbs, (Mchy. Dealers) Norfolk, Va.—To purchase planer and matcher, 4 side machine that will handle timber 10 inches thick and 18-in. wide; must be modern and in good condition.

**Presses (Automatic and Job).**—See Printing Machinery, etc.

**Printing Machinery, etc.**—C. C. Moseley, Lyons, Ga.—To purchase new and used job presses, automatic job presses and printing machinery.

**Pumps (Fire).**—H. L. Washburn, Auditor Navigation Dist., 5th Floor Courthouse, Houston, Tex.—Bids until Feb. 21 to furnish fire pump unit.

**Railway Equipment.**—Norfolk & Western Ry. Co., J. H. Clemmitt, Purchasing Agent, Room 351, N. & W. Ry. Bldg., Roanoke, Va.—Opens bids Feb. 20 for 402—cast steel side frames, Cont. Serial No. AA284; 250-gross tons steel rails, Cont. Serial AA290.

**Re-Surfacing.**—City of Pine Bluff, Ark.—Details under Construction News—Road and Street Construction.

**Road.**—Baltimore County, Towson, Md., will improve 2 roads. Details under Construction News—Road and Street Construction.

**Road.**—Collin County, McKinney, Tex.—Details under Construction News—Road and Street Construction.

**Road Drags.**—Warren County Supvrs., J. G. Sherard, Clk., Vicksburg, Miss.—Bids until March for 4 or more road drags, 8 ft. and one or more running gear for conveying house or camping outfit.

**Road.**—Harris County, Houston, Tex.—Details under Construction News—Road and Street Construction.

**Road.**—Island Creek Coal Co., Huntington-

W. Va. Details under Construction News—Road and Street Construction.

**Road.**—State Road Comm., Charleston, W. Va. Details under Construction News—Road and Street Construction.

**Road.**—Travis County, Austin, Tex., will improve 3 roads. Details under Construction News—Road and Street Construction.

**Road.**—Wichita County, Wichita Falls, Tex. Details under Construction News—Road and Street Construction.

**Road.**—Noxubee County, Road Comms. of Suprs. Dist. No. 5, Macon, Miss., will improve 2 roads. Details under Construction News—Road and Street Construction.

**Rulers.**—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids until Feb. 26 for delivering rulers to Naval Observatory, Washington; David Potter, Paymaster General of Navy.

**Seals and Labels.**—See Bottling Plant Equipment.

**Sewer.**—City of Tallahassee, Fla. Details under Construction News—Road and Street Construction.

**Sewer.**—City of Corsicana, Tex. Details under Construction News—Road and Street Construction.

**Sewer.**—City of Pine Bluff, Ark. Details under Construction News—Road and Street Construction.

**Sewer Construction.**—City of DeFuniak Springs, Fla. Details under Construction News—Sewer Construction.

**Sewer Construction.**—City of Altavista, Va. Details under Construction News—Water Works.\*

**Sewers.**—Va., Altavista. — Details under Water Works.

**Sewing Machines (Electric).**—L. D. Whitaker, Box 483, Jackson, Miss.—To correspond with manufacturers of electric sewing machines suitable for making work gloves.

**Sewage Treatment Plant and Sewer Construction.**—City of Charlotte, N. C.—Bids until Feb. 27 to construct sewage treatment plant, and for construction of approximately 20,000 ft. of sewers ranging from 36 to 48-in.; Joseph Firth, City Engr.; W. S. Stancill, Com. Public Works.

**Shell.**—H. L. Washburn, County Auditor, Houston, Tex.—Data and prices on 7000 cu. yd. shell for road building.

**Signs (Electric).**—J. B. Petty, Box 275, Dawson, Ga.—Data and prices on electric signs.

**Skiving Machine.**—W. F. Black, Gen. Sec., Chamber of Commerce, Montgomery, Ala.—Data and prices on skiving machine, machine to make boots for automobile tires.

**Stamped Steel Product.**—Piet Vlag, West Tampa, Fla.—To correspond with manufacturers of hot stamped steel such as boiler heads, crank cases and similar heavy steel articles; to contract for the manufacture of a heater out of heavy stamped steel.

**Steel Bars.**—See Building Materials.

**Steel (Doors, Ceilings, etc.).**—See Building Materials.

**Street Improvement.**—City of Electra, Tex. Details under Construction News—Road and Street Construction.

**Stone Cutting and Dressing Machinery.**—C. Marshall Gravatte, Baltimore, N. C.—To correspond with manufacturers of stone cutting and dressing machinery.

**Tank (Air Receiving).**—Wilson-Hock Co., (Mchy. Dealers) City Point, Va.—Dealers prices on air receiving tank, suitable for 100 lb. pressure, size approximately 3x5.

**Tire Equipment.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until Feb. 26 to furnish 3 double notched knives; 4 single knotted knives; 3 corrugated stitchers; 3 flat rollers; 2 shears; 72 cork patches; 25 lbs. cushion gum; 15 lbs. tube gum; 15 gal. vulcanizing cement; 25 lbs. cord fabric; 30 lbs. tread stock; 300 ft. flap material and 4 tire spreaders; delivery Post Quartermaster, Marine Barracks, Quantico, Va. Sch. 347.

**Tire Vulcanizing Machines, etc.**—North Eastern Rubber Works, Jr., 1982 N. Gay St., Baltimore, Md.—Prices on vulcanizing machines to repair tires and rubber boots; head cutters; pulling machines for old tires; and skiving machine.

**Transformers.**—Erin Utilities Co., Erin Tenn.—Bids, bulletins, etc. on used transformers.

**Tunnel Construction.**—Kansas City, Mo., Marty H. Raming, City Pur. Agt. Details under Construction News—Miscellaneous Construction.

**Vault Fixtures.**—People's State Bank, Fisher F. Scaggs, Pres., Wayne, W. Va.—See Bank Equipment.

**Vending (Cup) Machines.**—See Bottling Plant Equipment.

**Ventilators (Roof and Panels).**—See Building Materials.

**Washing Machines (Bottle).**—See Bottling Plant Equipment.

**Water Coolers.**—See Bottling Plant Equipment.

**Water Works.**—City of Sanford, Fla.—Details under Construction News—Water Works.

**Water Works.**—City of Altavista, Va. Details under Construction News—Water Works.

**Windows and Doors.**—Raymond R. Nicholson, Register of Deeds, Sylva, N. C.—See Building Materials.

**Wood (Round) Rollers.**—A. K. Robins & Co., Inc., 116 Market Place, Baltimore, Md.—To purchase quantity of round wood rollers; correspond with manufacturers in New York state.

**Woodworking Machinery.**—C. Marshall Gravatt, Baltimore, N. C.—Woodworking machinery suitable for equipping small cabinet making plant.

## Financial News

### New Financial Corporations

Ala., Birmingham—Equitable Service Plan, Inc., chartered by W. H. Martin, Ruth D. Richards and others.

Ala., Muscle Shoals—Muscle Shoals Abstract & Title Co., capital \$10,000, incorporated with R. M. Sims, Pres.; J. L. Jaynes, Sec.-Treas.

Fla., Orlando—American National Reserve Insurance Co., 305 State Bank Bldg., capital \$500,000, incorporated with Lewis A. Irons, Pres.; Harold M. Starbird, Sec.

Fla., St. Petersburg—Alexander National Bank, of St. Petersburg, capital \$200,000; W. T. Bayard, 644 Central Ave., St. Petersburg, Correspondent.

Fla., Stuart—Redfern Investment & Development Co., capital \$10,000; incorporated by C. J. and O. C. Earley and Paul T. Davis.

Fla., Tampa—Knight Investment Co., capi-

tal \$400,000, incorporated with Peter O. Knight, Pres.; Jos. M. Knight, V. P.; Peter O. Knight, Jr., Gen. Mgr.

Ga., Atlanta—City National Bank of Atlanta, capital \$200,000; conversion of City Bank of Atlanta, with main office and 2 branches, all in city of Atlanta.

Ga., Savannah—Savannah's Industrial Development Corporation, capital \$26,000, incorporated by Samuel B. Adams, Leopold Adler, Andrew Apres and others.

Mo., Kansas City—General Securities Co., incorporated by F. M. Johnson, J. H. Smith and others.

Mo., St. Louis—Bankers Bond & Investment Co., capital \$100,000, incorporated by M. I. Robins, T. J. Sullivan and others.

Mo., St. Louis—Lasker Finance Corp., capital \$50,000, incorporated by J. F., Emil M. and Max L. Lasker.

Mo., St. Louis—Surety Loan & Thrift Co., capital \$20,000, incorporated by Willard B. Pillsbury, Los Angeles, Cal.; Daniel Breck, St. Louis and others.

N. C., Denton—Carolina Bank & Trust Co., Bank of Denton Bldg., incorporated by Arthur Ross, T. J. Finch, J. F. Garner and others.

N. C., Raleigh—North Carolina Agricultural Corp., capital \$100,000, organized by John H. Boushall, A. E. Ring; both Raleigh; G. A. Norwood, Goldsboro and others.

N. C., Salisbury—Hobson-Fuller Co., capital \$80,000, incorporated by W. H. Hobson, Frank W. Fuller and others.

S. C., Greenville—Bailey-Razor Insurance Co., incorporated by Herbert Bailey, and Wm. E. Razor.

S. C., Laurens—People's Enterprise Bank, Enterprise National Bank Bldg., capital \$100,000, plans organizing with C. H. Roper, Pres., following merging of People's Loan & Exchange Bank and Enterprise National Bank.

Tex., Fort Worth—Investment Securities Co. of Texas, authorized capital \$1,000,000, incorporated with T. P. Judkin, Pres., Dallas.

Tex., Houston—Houston Securities Co., capital \$100,000, incorporated by E. J. Fountain, John Hammond and others.

Tex., Houston—Paul Stillman interested in organizing bank with \$250,000 capital.

Tex., San Antonio—Alamo Securities Co., capital \$100,000, incorporated by R. S. Yantis, J. W. Clayton and others.

Va., Alexandria—Mortgage Discount Co., capital \$15,000, incorporated with Richard V. Mattingly, Pres.; Iollie H. Moore, Sec., all Washington, D. C.

Va., Honaker—Honaker National Bank, capital \$25,000; conversion of Farmers & Miners Bank, Honaker.

W. Va., Fairmont—National Bank of Fairmont, capital \$400,000, organized with Brooks Fleming, Jr., Pres.; N. E. Jamison, Cashier. (Lately noted.)

W. Va., Northfork—Northfork Finance Corp., Clark National Bank Bldg., capital \$100,000, incorporated with John H. Bane, Sec.-Treas.

W. Va., Wayne—People's State Bank, capital \$50,000, incorporated with Fisher F. Scaggs, Pres.

### New Securities

Ala., Attala—School—City voted \$30,000 bonds. Address The Mayor.

Ala., Huntsville—School—City, E. R. Matthews, Clk., rejected bids for \$150,000, 5% bonds. (Lately noted bids until Feb. 12.)



Ala., Montgomery — Street Improvement—City Comm., sold \$140,000, 6% bonds to Steiner Brothers, Birmingham, Ala., at 102.10 plus accrued interest to date of delivery.

Ala., Parrish — School — City voted \$15,000 bonds. Address School Board. (Lately noted.)

Ark., Camden—Paving—Tigrette & Co., Memphis, Tenn., purchased \$55,000 bonds.

Fla., Blountstown—Water Works, Electric Lights, and Sewerage System—City sold \$50,000 bonds to J. B. McCrary Co., Atlanta, Ga.

Fla., Brooksville—Hernando County, H. C. Mickler, Clk., will receive bids until March 8 for \$450,000, 6% bonds.

Fla., Clearwater—Gas Plant—City voted \$150,000 bonds. Address The Mayor. (Lately noted.)

Fla., De Land—School—Volusia County, Special Tax School Dist. No. 6, will vote March 11 on \$125,000 bonds; V. W. Gould, Chmn. Board of Public Instruction of Volusia County.

Fla., Kissimmee—School—Osceola County, Board of Education, will vote March 15 on \$100,000 bonds.

Fla., Lake Wales—Improvement—City, L. H. Kremer, Mayor, will receive bids until Feb. 28 for \$125,000 bonds.

Fla., Lake Worth—Inlet—Comms. of South Lake Worth Inlet Dist. sold \$125,000 bonds to Farmers Bank & Trust Co., West Palm Beach, at above 98 and accrued interest.

Fla., Leesburg—Refunding—City Comm., W. E. Harkness, City Clk., sold \$95,000, 5½% bonds to Atlantic National Bank, Jacksonville, at \$94.145.

Fla., Miami—Municipal Improvements—Dade County contemplates voting at an early date on \$1,500,000 bonds; Hobart Crabtree, County Engr.

Fla., Miami—Road—Dade County Comms., contemplates voting on \$226,000 bonds.

Fla., Miami—School—C. W. McNear & Co., Chicago, Ill., purchased \$350,000, 6% Dade County Special Tax School Dist. No. 2, at premium of \$28,500.

Fla., Moore Haven—Road—Glades County will vote first week in March on \$275,000 bonds. Address County Comms.

Fla., Oak Hill—School—Volusia County, Board of Public Instruction, will receive bids at office of Geo. W. Marks, County Supt., De Land, until March 13 for \$30,000, 6%, Special Tax School Dist. No. 9; V. W. Gould, Chmn.

Fla., Wauchula—Road—Breed, Elliott & Harrison, J. C. Mayer & Co., all Cincinnati, Ohio, and Blanchett, Thornburg & Vandersal, Toledo, Ohio, purchased \$850,000 bonds at \$880.175 and accrued interest.

Ky., Olive Hill—Water-Works—City will vote on bonds. Address The Mayor.

La., Abbeville — School — Whitney-Central Trust Co., New Orleans, La., purchased \$20,000 Seventh Ward bonds, at par plus premium of \$132.

La., Colfax—School—Grant Parish School Board, J. H. McNeeley, Pres., will receive bids until March 3 for \$35,000, 5%, \$1000 denom. School Dist. No. 16 bonds.

Miss., Batesville—Drainage—Wm. R. Compton Co., New York, purchased \$1,500,000 6%, \$1000 denom. bonds.

Miss., Greenwood—Paving—City will vote March 6 on \$96,000 bonds. Address The Mayor.

Miss., Tchula—School—City voted \$40,000 bonds. Address Holmes County Board of Education, Lexington, Miss.

Mo., Cape Girardeau—Court House—Cape

Girardeau County plans voting Aug. 9 on \$40,000 bonds. Address County Comms., Millersville, Mo.

Mo., Festus—Kauffman, Smith & Co., Inc., St. Louis, Mo., have purchased \$175,000, 5% bonds.

Mo., Sikeston—Sewer—City will vote March 4 on \$100,000 bonds. Address The Mayor.

N. C., Albemarle—School—Town voted \$200,000 bonds. Address R. L. Smith, Pres. of School Board.

N. C., Burlington—Improvement and Sewer—City, M. W. McPherson, Clk., will receive bids until Feb. 26 for \$250,000 bonds.

N. C., Cameron—School—Cameron Graded School Dist., Board of Trustees, W. C. Spivey, Sec., will receive bids until Feb. 23 for \$50,000, 6% bonds. (Lately noted bids until Feb. 5.)

N. C., Durham—Street and Public Improvements—City, R. W. Rigsby, City Mgr., will receive bids until Feb. 25 for \$600,000 gold bonds, as follows: \$300,000 street, and \$300,000 public improvement.

N. C., Morganton—Improvement—City, L. E. Smith, Clk., will receive bids until March 5 for \$150,000, 6% bonds.

N. C., Morganton—Street Improvement—City voted \$150,000 bonds; R. W. Pipkin, Mayor. (Lately noted.)

N. C., Mt. Gilead—Street Improvement and Water—Sidney Spitzer & Co., Toledo, Ohio, purchased \$67,000 bonds at premium of \$505.

N. C., Robbinsville—School Funding — Title Guarantee & Trust Co., Cincinnati, Ohio, purchased \$10,500, 6½% bonds at par and interest, plus \$111.

N. C., Robersonville—Water and Sewer—Caldwell & Co., Nashville, Tenn., purchased \$100,000 bonds at premium of \$2231.50.

N. C., Saluda—Water Works—City plans voting on \$40,000 bonds. Address The Mayor.

N. C., Sylva—School Funding, Road and Bridge—E. C. Willis, Trinity, N. C., and Seasongood & Mayer, Cincinnati, Ohio, purchased jointly \$20,000, 5% school bonds at par and interest, and \$50,000, 6% road and bridge bonds at par, and interest and premium of \$3000.

N. C., Tarboro—Bridge and Jail—Caldwell & Co., Nashville, Tenn., purchased \$140,000 bonds, including \$100,000 bridge at premium of \$1420, and \$40,000 jail at premium of \$372.

N. C., Waynesville—School—Haywood County Comms., will receive bids until March 17 for \$177,000, 5½% Waynesville Township Special School Taxing Dist. bonds; C. F. Kirkpatrick, Register of Deeds.

Okla., Tulsa—School—City will vote Feb. 26 on \$2,000,000 5 per cent bonds. Address Board of Education. (Lately noted to vote Feb. 19.)

S. C., Latta—Water Works, Sewers—Town sold \$60,000, 5½% bonds to Bank of Charleston, Charleston, S. C.

S. C., McColl—Street Improvement, School—Town voted \$50,000 bonds; plans voting on \$80,000 bonds for school. Address The Mayor.

S. C., Walhalla—Paving—City will vote March 4 on \$50,000 bonds. Address The Mayor.

Tenn., Greeneville—School—City plans voting May 3 on \$100,000 bonds. Address The Mayor.

Tenn., Greeneville — Water and Sewer—Town voted \$45,000 bonds; will sell \$45,000,

6% bonds on Feb. 26; D. P. Mason, Mayor; W. C. Thacker, Recorder.

Tenn., Murfreesboro—Road — Rutherford County voted \$750,000 bonds. Address County Comms.

Tenn., Sparta—School—City sold \$50,000 bonds to J. W. Jakes & Co., Nashville, Tenn., at 5½%.

Tex., Alvin—Street Improvement—City, Chas. Scruggs, Clk., sold \$20,000, 6% bonds to H. C. Burt & Co., Houston, Tex., at par plus accrued interest.

Tex., Angleton—Drainage—County Treasurer purchased \$24,000, 6% bonds.

Tex., Bellville—Road—Austin County, Precinct No. 1, contemplates \$450,000 bond issue. Address County Comms.

Tex., Brownsville—Road—Haywood County sold to American National Co., Nashville, Tenn., \$150,000, 5% bonds, at \$152,326.50.

Tex., Benjamin — Road — Knox County Comms. will vote March 1 on \$250,000 bonds.

Tex., Carrizo Springs—Road—J. E. Jarrett & Co., have purchased \$234,000 bonds at 98.

Tex., Colorado—Road—Mitchell County will vote March 22 on \$325,000 bonds. Address County Comms.

Tex., Collinsville—Electric Light Plant—City will probably vote on \$10,000 bonds. Address The Mayor.

Tex., Cooper—School—Cooper Independent School Dist. voted \$85,000 bonds. Address Dist. School Trustees. (Lately noted to vote.)

Tex., Crandall—School—Crandall Independent School Dist., will call election March 1 to vote on \$40,000 bonds. Address Pres. Board of Trustees.

Tex., Dallas—Water-Works—M. G. James, City Sec., will receive bids until Feb. 25 for \$2,000,000 4½ per cent \$1000 denom. bonds; R. V. Tompkins, City Auditor.

Tex., Franklin—School — School Board, Franklin Independent School Dist., will call election on March 10 to vote on \$50,000 bonds. Address Pres. Board of Trustees.

Tex., Georgetown — Road — Williamson County, F. D. Love, County Judge, will receive bids until March 3 for \$100,000, 5%, \$1000 denom. bonds.

Tex., Greenville—Street Improvement—City sold \$100,000 of \$450,000 bonds to Hanchett Bond Co., Toledo, Ohio, at \$98.63.

Tex., Grand Prairie—School—City voted \$20,000 Grand Prairie Independent School Dist. bonds. Address Pres. Board of Trustees.

Tex., Huntsville—Road and Indebtedness—Walker County contemplates voting on \$1,500,000 bonds. Address County Comms.

Tex., Orange Grove—School—City voted \$40,000 bonds. Address Board of Trustees, Orange Grove Independent School Dist.

Tex., Seymour — Hospital — Bosworth, Chanute & Co., Denver, Colo., purchased \$50,000 bonds.

Tex., Sherman—Road—Grayson County contemplates voting on \$5,000,000 bonds; H. M. Scott, County Engr., Denison, Tex.; R. M. Carter, County Judge.

Va., Covington—School—City contemplates voting on \$75,000 bonds. Address The Mayor.

Va., Norfolk—Warehouse — City Council authorized issuance of \$500,000 Norfolk Municipal Terminal bonds.

Va., Wise—Water and Sewer—Town Council will petition Circuit Court to call election for \$125,000 bond issue.



W. Va., Fairmont—Filtration—Well, Roth & Irving, Cincinnati, Ohio, purchased \$150,000, 5%, \$1000 denom. bonds at premium of \$2265.

W. Va., Point Pleasant—School—City defeated \$38,000 bonds; Peter Steenberg, Pres. Board of Education.

W. Va., Wayne—Road—Wayne County, Grant and Stonewall Dist., voted \$58,000 and \$111,000 bonds, respectively; address County Comms. (Lately noted.)

W. Va., Winfield—Road—Putnam County, Buffalo District, will vote Feb. 26 on \$60,000 bonds. Address County Comms.

### Financial Notes

Acceptance Corporation of America, 501 Commercial Bank Bldg., Bluefield, W. Va., has changed name to American Finance Co.

First National Bank of Midlothian, Tex., absorbed Guaranty State Bank of Ovilla.

Malone State Bank, Malone, Tex., increases capital from \$25,000 to \$40,000.

Mechanics Building & Loan Assn., Greenville, S. C., increases capital from \$1,000,000 to \$2,000,000; Wm. Goldsmith, Pres.

National Liberty Insurance Co., of America, 225 E. Redwood St., Baltimore, Md., purchased control of Baltimore American Insurance Co.; plans continuing local corporation as separate company.

Oklahoma City Building & Loan Assn., 125 N. Harvey St., Oklahoma City, Okla., increased capital to \$30,000,000; H. T. McWilliams, Pres.; F. P. Johnson, Treas. (Lately noted.)

Okla., Tulsa—Tulsa Industrial Loan & Development Co., I. G. Fidler, Sec., increases capital from \$200,000 to \$400,000.

Standard Investment Co., Dallas, Tex., increased capital from \$25,000 to \$50,000.

St. Charles Building & Loan Assn., St. Charles, Mo., will increase capital from \$800,000 to \$1,000,000.

The Equitable Trust Company, of New York, has been appointed registrar of the common and preferred stocks of the Florida Public Service Company.

### Trade Literature

#### Concerning the Use of Oxy-Acetylene.

"Oxy-Acetylene Tips," issued by the Linde Air Products Co., New York City, gives many interesting facts in its January issue, the leading article telling about the value of a central welding shop in a large industry. There are other equally valuable contributions and many pertinent pictures.

#### Metal Pickle Bath Control.

The American Chemical Paint Co., 1118-26 South Eleventh St., Philadelphia, Pa., has issued a leaflet concerning the A. C. P. pickle control Rodine extract, which it is claimed more than pays for itself in the acid saved, and that it costs less than nothing to prevent fumes and to stop the acid dissolving and pitting the metal. This extract is a liquid chemical that is added to the hydrochloric or sulphuric pickling bath and it controls the acid so that its action is confined solely to the removal of scale or rust. Furthermore, it is stated that it reduces the acid consumption from 30 to 60 per cent without reducing the speed of pickling.

#### Reinforcement for Concrete Roads.

The Havemeyer deformed bar reinforcement for concrete pavements is comprehensively described and illustrated in a large, fine booklet issued by the Concrete Steel Company, 42 Broadway, New York. The pictures show how the reinforcement is assembled on the job and how it is applied in the construction of pavement. This type of construction prevents, it is stated, the cracking of concrete which is sometimes exceedingly bad and if unchecked results in the rapid deterioration of a road. The publication gives complete information for the use of contractors, including insets with diagrams of details of construction. It is really a construction manual for road builders.

### Book Review

Business Fundamentals. By Alvan T. Simonds. New York: The Ronald Press Company. 1923. Pp. 221. \$2.25.

This book by the president of the Simonds Steel and Saw Co., was written, it is stated after twenty-five years during which Mr. Simonds studied the careers of leading men in American commerce and industry and, after analyzing the methods of such men as Morgan, Rockefeller, Gary, Schwab and Ford, he has worked out what he believes are the principles which have guided them to conduct their respective enterprises so profitably. These he has reduced to 100 fundamentals, knowledge of which, it is believed, will directly aid any man to work more intelligently and effectively. The book is a manual of the practice of men who have been successful; it develops the principles of management as revealed by an examination of thousands of detached items, and groups the final analysis under a hundred general headings. Some years hence the selection of one hundred fundamentals might include certain principles that were now and also exclude others now in this compilation, but it appears certain that the principles which Mr. Simonds presents after his long study will be valuable for many years.

Nineteenth Century Evolution and After. By Marshall Dawson. New York. The MacMillan Company. 1923.

Amid the current tendencies among thinking men of today toward pessimism nothing is more welcome than the positive declaration that human nature can be revised as pointed out by the author of this book. 'Something direct and clean cut such as this is necessary and he demonstrates that the religion of the Bible is not out of harmony with scientific evolution if the form of the theory of evolution used in the comparison is modern. Mr. Dawson shows that evolution favors every time the form of life that co-operates with it in transcending its environment, rather than those other forms which simply fit into their environment. This presentation ought to be a real peace maker by ending the latest war of religion against science. Mr. Dawson's pointing out of the vigorous religion of St. Paul shows the way to hesitating souls and inclines to set them upon the highway to righteousness.

How to Organize and Conduct an Export and Import Business. By R. Osborne. London: Effingham Wilson. 1923.

"A man to be successful," says the author, "must have a good knowledge of men and business matters, and this will only be attained after a successful career as a student, followed by a practical experience in a merchant's office. This book is written to help the student to gain an insight into the matters that count." Continuing he says that examples and illustrations in the book are taken from a transaction successfully carried through. There are ten chapters, dealing in order with the organization and establishment of a business and thereafter with business operations in detail. The book should be of value to business men contemplating engaging in export trade or in import business or both. Although written from the British point of view it is applicable to business conducted out of and into American ports. It is not large, the number of pages being less than a hundred, and its style is direct and easy to read, as is proper in a work of this nature.

## INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers, or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

#### Office in New Location.

On February 1 the Birmingham, Alabama, office of the Sullivan Machinery Company removed from its former location in the Brown Marx Building to 2108 Fifth Ave., North, where ample ground floor space provides more adequate accommodation for business. G. P. Small is the local manager. The headquarters of the company are in Chicago.

#### Improved Hanger for Box Car Doors.

John G. Carroll, 608 East Martin St., Raleigh, N. C., has been granted a patent on an improved box car door hanger equipment which is designed so as to permit opening and closing of a box car door with but little effort, and he expects to put this patent on the market for sale. Mr. Martin remarks, in a letter to the MANUFACTURERS RECORD, that he has observed very closely for years the necessity of having a perfect door-hanger and that he has produced one after an experience of twenty-five years in handling box cars and opening and closing the doors thereof convinced him that something more than what the railroads had in that line was needed.

#### Big Improved Gas-Making Plant.

A prominent feature of the new \$2,500,000 Beargrass gas plant, Louisville, Ky., is the washer cooler plant designed and erected by the Steere Engineering Co., of Detroit, Mich. This system consists of two towers 8 feet in diameter by nearly 60 feet high, and 38 stacks of standard Steere cooling coils and each tower is also provided with 40 vertical feet of scrubbing grids of the same make. The cooling coils are particularly noteworthy. The thirty eight stacks, each 20 feet long by twenty-six 2-inch pipes high, are situated on the roof of the pump house. Welded steel box headers take the place of return bends, allowing the pipes to be spaced close together. Into one side of these headers the pipes are expanded, accessibility being insured by a 2-inch pipe plug in the outer side of the header opposite each tube end. Gas made at this plant is manufactured by four 12-foot water gas sets equipped with the back-run process, which is essentially the same as the standard water gas practice except that the down run is substituted by the backrun, which, it is stated, has advantages.

**In New Location.**

The F. T. Dooley Lumber Company, Incorporated, is now located at Brinkley, Ark., to which place they recently removed and where they operate a band mill, having discontinued their office at Memphis, Tenn., on January 15.

**Contracting Office in Los Angeles.**

The Virginia Bridge & Iron Co., Roanoke, Va., have established a contracting office in Los Angeles, California, under the charge of Henry E. Robertson, contracting engineer, whose office address is 659 Metropolitan Theatre Building.

**District Representative Appointed.**

David O. Stewart has been appointed district sales representative at St. Louis, Mo., with office in the Bank of Commerce Building there for the Ohio Electric & Controller Co., of Cleveland, Ohio. Mr. Stewart succeeds Thomas E. Beasley who resigned to engage in other business. This change took place February 15.

**Memphis Office Established.**

The Northwest Engineering Company, whose home address is 28 East Jackson Boulevard, Chicago, Ill., have opened an office in the Central State Bank Building, 127 Madison St., Memphis, Tenn., with M. B. Rider in charge thereof. Mr. Rider will therefore have authority over the sale of Northwest crawler cranes, shovels, draglines and trench pull shovels by agencies in Tennessee, Mississippi, Arkansas, Alabama, Louisiana and Texas. He is a civil engineer and a graduate of New York University with more than fourteen years of engineering experience, and is fully qualified to extend advice as to shovel and crane ms.

**New Representatives Appointed.**

The Heine Boiler Company, of Saint Louis, Mo., has sent out announcements to the effect that the Tennant Company, Union National Bank Building, Houston, Tex., now represent them in a new territorial division comprising the entire southern half of Texas, J. A. Tennant being in charge of this office. Smith & Whitney, of Dallas, Tex., will continue to represent the Heine Company in the northern half of the state.

**The New Japanese Bond Issue.**

An offering of \$150,000,000, thirty year sinking fund 6½ per cent gold bonds of the Imperial Japanese Government External Loan of 1924 is announced on another page of this issue by J. P. Morgan & Co., Kuhn, Loeb & Co., the National City Company, the First National Bank, the Guaranty Company, and the Bankers Trust Co., all of New York, together with Harris, Forbes & Co., Lee, Higginson & Co., Dillon, Read & Co. and Kidder, Peabody & Co., of that and other cities, but particular attention is directed to the fact that all of these bonds, having been subscribed for, the advertisement appears only as a matter of record. The bonds are in \$1000, \$500 and \$100 denominations and they are redeemable as a whole or in part at the option of the Government, upon three months notice on or after Feb. 1, 1939. Particulars are given in the announcement.

**Pulverized Limestone and Crop Rotation.**

"Lime One-Fourth of the Farm Each Year" is a slogan adopted by the American Limestone Company of Knoxville, Tenn., manufacturers of "Masco" pulverized limestone. It is almost verbatim a quotation from Prof. C. L. Newman, associate editor of the Progressive Farmer, who says: "I believe the plan of liming one-fourth of

the farm each year is a most excellent one, not only from the good effects expected from the lime, but also on account of its being an entering wedge that might lead to giving more attention to an established rotation." As to the rate of application it is noted by the company that in coastal plains on average sandy soil, around 1000 pounds per acre broadcast of a very finely and uniformly pulverized limestone will pay, and in the Piedmont and Intermountain regions from 1000 pounds to a ton per acre will be profitable where a soil building rotation is practiced.

**Power Plant for General Use.**

The Smith Gas Engineering Co., Dayton, O., is manufacturing a general purpose power plant which is described as a durable, dependable and economical source of power consisting of a General Motors truck engine and a General Electric generator when electric service is required. Two models are built, Model A consisting of a four cylinder gasoline engine direct connected to a direct current generator through a flexible coupling, the two being mounted upon a cast iron sub-base. A slate panel board on an angle iron frame is supported from the same base, this board carrying a field rheostat, a fused line switch, ammeter, and voltmeter. This power plant is rated at 17½ KW. The Model B consists of the same engine equipped with a 12 inch pulley for belting to a line shaft, pump or other machine requiring belted power. This model is rated at 25 horsepower. The engine is a four cylinder machine, the cylinders being of 4½ inches bore and 6-inch stroke. The plant will furnish power for schools and other institutions, contractors, warehouses, ferry boats, pumps, machine shops, grain elevators, etc.

**Construction Under Way on Gorgas Steam Plant Extension.**

Good progress is being made on the installation of the third unit of the Gorgas steam plant of the Alabama Power Company. It will be housed in an extension to the present generating room, 45 feet by 85 feet with a height of 75 feet from the floor of the condenser pit to the bottom of the roof truss. In its construction 2000 yards of concrete, 52 tons of structural steel and 76 tons of reinforcing steel will be used. The roof slabs will be "Pyrofill" cast gypsum four inches thick. This type of construction was selected to avoid condensation and sweating. Fenestra steel sash will be placed.

The foundation for the turbine will be a combination of structural steel and reinforced concrete, and 15 tons of steel and 220 yards of concrete will be required.

The unit will comprise a 30,000 horse power steam turbine operated with a steam pressure of 225 pounds, 28 inches vacuum and 175 degrees superheat, driving an 1800 rpm, 13,200 volt General Electric generator rated at 20,000 kw, 80 per cent power factor.

The condenser will be a Westinghouse-LeBlanc No. 26 jet type to give a 28-inch vacuum at the turbine under full load with 77 degrees F. injection water. A steam turbine driven 725 horse power Westinghouse pump will be used.

The transformer bank will comprise one bank of three single phase, 6667 kva, 13,200-63,700 volts transformers for Delta to Star connection, and type H-6 General Electric oil switches rated at 500,000 kva will be installed.

**Will Move Cincinnati Glass Plant to Huntington.**

Huntington, W. Va., February 6—[Special.]—Through the Chamber of Commerce of this city, it is announced that the greater part of the Charles Boldt Glass Company's Cincinnati plant will be moved to Huntington to be consolidated with

the glass manufacturing plant which the Boldt company now operates here. It is proposed to temporarily discontinue but not to dismantle the bottle making department at Cincinnati, all orders for bottles to be handled by the Huntington plant while the temporary arrangement is in effect. The mold making department and machine shop will be moved to Huntington and consolidated.

**Convention of International Purchasing Agents.**

Boston, Mass.—The ninth annual International Purchasing Agents' convention under the auspices of the National Association of Purchasing Agents, will be held in this city during the week of May 19. As a part of the convention, the association will conduct an exhibition known as The Informashow, the exhibition and convention to be held at Mechanics Building. A. V. Howland, 200 Devonshire street, Boston, is chairman of the general convention committee.

**Lehigh Portland Cement Plant at Birmingham to Greatly Increase Annual Capacity.**

The Lehigh Portland Cement Co. of Youngstown, Pa., advises the MANUFACTURERS RECORD that it is enlarging its plant at Birmingham, Ala., the work consisting of the installation of a new kiln in addition to three already in operation, with a corresponding expansion of other departments. It is expected that the entire installation will be completed by early spring and will increase plant capacity by more than one-third, making a total annual capacity of over 1,500,000 barrels. Work is being done by the company's own organization.

The plant at Birmingham began production in August, 1923 and the present increase in productive capacity is necessitated by the demand that has grown steadily since the mill began to ship.



# KOEHRING

## What's the Overhead of Wear and Tear?

**C**AN you better lift a bag of cement holding it at arm's length? No—you want to get *over* it in raising it off the ground, and *under* it to boost it up. It's the same principle with a charging skip. The Koehring gets a direct pull on the charging skip because the cable sheaves are between the pivoting point and the skip—and the frame up-rights are well under the skip as it approaches charging position. No pull against the pivoting point! No excessive strains and leverage on the frame to throw moving parts out of alignment, which is the great cause of breakages and excessive wear!

Koehring Heavy Duty construction is the surest profit factor you can put on a job.

### CAPACITIES

**Pavers**—7, 10, 14, 21, 34 cubic feet mixed concrete. Steam, gasoline or electric power. Can be mounted either on regular steel rim wheels or solid rubber tires, half length multiplane or full length multiplane. Boom and bucket or spout distribution. Adjustable derrick—either single or double on 21E and auxiliary water tank on 21E and 32E if desired. Batch meter.

**Construction Mixers**—10, 14, 21, 28 cubic feet mixed concrete. Steam, gasoline or electric power. Mounted on trucks or skids. Rubber tires optional. Equipped with power charge skip. Charging chute or batch hopper.

**Dandie**—4 and 7 cubic feet mixed concrete. Gasoline engine on 107S.

Write for Paver Catalog 19.

### KOEHRING COMPANY

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GASOLINE SHOVELS  
MILWAUKEE, WISCONSIN

#### Sales Representatives

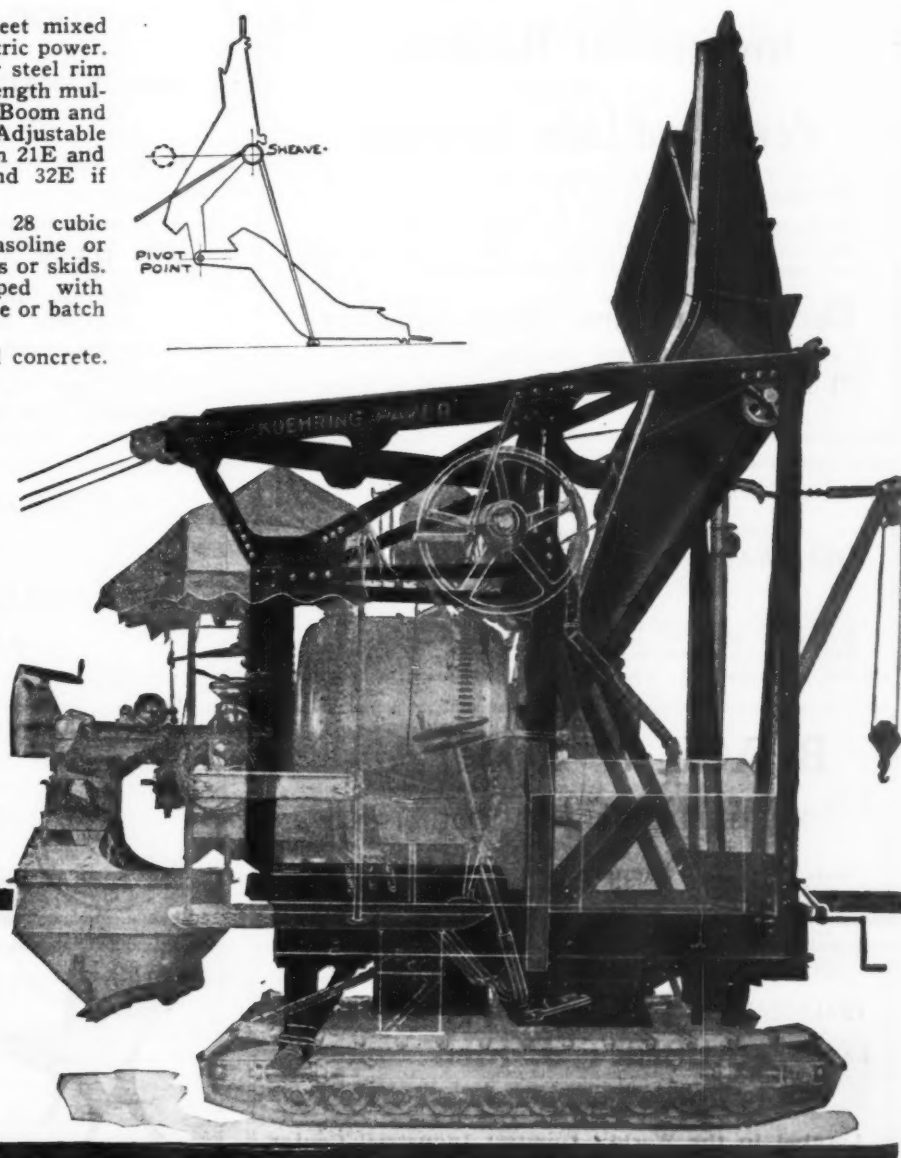
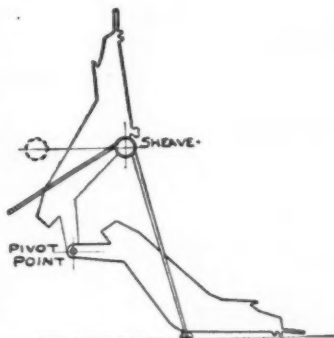
T. M. Brown, 20 Knickerbocker Bldg.,  
Baltimore, Md.  
W. A. Nelson, Exchange Bldg., Mem-  
phis, Tenn.  
Warren C. Shankle, Godchaux Bldg.,  
New Orleans, La.  
Edgar Alexander, 905 Fourth National  
Bank Bldg., Atlanta, Ga.  
Wilson, Weesner & Co., 177 Second  
Ave. North, Nashville, Tenn.  
Earnest Bros., 805 E. Franklin St.,  
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Sales Offices and Service Warehouses in  
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Foreign Dept., Room 1370, 50 Church St.,  
New York.

Canada, Koehring Company of Canada,  
Ltd., 105 Front St., East, Toronto,  
Ontario.

Mexico, F. S. Lapum, Cinco de Mayo 21,  
Mexico, D. F.





### Johns Hopkins Hospital to Erect Dispensary—Building to Cost \$1,000,000—Equipment \$750,000.

Plans are being prepared by Joseph Evans Sperry of Baltimore, for a new dispensary to be erected by the Johns Hopkins Hospital, Baltimore, which will involve a total expenditure of \$1,750,000, of which \$1,000,000 will be required to erect the building and the remainder for equipment.

The structure will be seven stories, located on the site of the present dispensary, adjoining the new pathological building and connecting it with the surgical building, the three structures to form a unit. It will be erected in units, so that the work of the dispensary may be continued throughout the period of construction. Operating rooms will be located on the seventh floor, the admitting room on the first floor and various clinics on other floors.

### Tampa Postpones Election on \$3,000,000 Bonds.

Mayor Perry G. Wall of Tampa, Fla., advises the MANUFACTURERS RECORD that the election to have been held in Tampa on February 12 on \$3,000,000 of bonds for municipal improvements, including an auditorium, market and fire stations, has been postponed. It is intended to have the election at another time, probably about March 15 or later. Details of improvements to be undertaken will be available when the outcome of the vote is known.

### Increases Electric Railway Power Service.

Norfolk, Va.—The Virginia Railway & Power Co. of this city has purchased four multiple retort underfeed stokers from the stoker department at Philadelphia of the Westinghouse Electric & Manufacturing Co., and four 512-horsepower boilers from the Babcock & Wilcox Co. of New York, all to be installed in the new extension of the Reeves Avenue power station in Norfolk. The installation is complete with non-clinking extension sidewall tuyeres and steam operated refuse dumping mechanisms.

Westinghouse double cylinder steam stoker engines connected to the fuel feeding mechanism by chains, will be used for driving the stokers, while a large fan manufactured by B. F. Sturtevant Co. of Hyde Park, Boston, and driven by a 250-horsepower type C. W. Westinghouse motor, will supply air to the fuel beds.

Electrical auxiliaries have also been purchased by the Virginia Railway & Power Co. for its 12th Street power house here. Three Westinghouse type S K motors equipped with type V-5 controllers will drive the stokers, while a 75 horsepower, 2200-volt C S motor will supply forced draft.

The Chamber of Commerce of Anderson, S. C. is interested in the promotion of plans for the erection of an eight or ten-story office building in Anderson to cost about \$250,000.

## Investment Bankers

are offered

## Power and Light Securities

issued by companies with long records of substantial earnings.

We extend the facilities of our organization to those desiring detailed information or reports on any of the companies with which we are identified.

## Electric Bond and Share Company

(Paid-up Capital and Surplus, \$50,000,000)

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## DELAWARE REGISTRATION TRUST CO.

100 West Tenth Street  
Wilmington, Del.

J. Ernest Smith, President and General Counsel.  
Chas. Warner Smith, Vice-President.  
Harry W. Davis, Secretary and Treasurer.

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We are interested in the purchase of Southern Municipals including road, school, county, drainage and levee bonds.

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for Commissaries, Factories and Mines, in denominations of 1c to \$1.00. Metal checks for any purpose.

Write for prices.

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107 So. Wabash Avenue

**"THE ATMOSPHERE OF YOUR BANK"**

said a customer recently, "is not cold, but radiates cheerfulness and helpfulness."

That is our aim. We are properly conservative, but we recognize the obligation resting upon all bankers to help meet deserving business requirements.

*We invite correspondence.*

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GWYNN CROWTHER, President

Pratt Street and Market Place, Baltimore, Md.

Capital and Surplus \$1,000,000.00

Member Federal Reserve System

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Capital and Surplus - \$2,300,000.00

General Banking - Domestic and Foreign

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CAPITAL, \$1,000,000

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Specialist in Examination of

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517-520 Harris Trust Bldg.

111 West Monroe St.

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**Municipal Bonds**

Inquiries invited from municipalities and contractors. We buy city, county, district, school, road, lighting, water works and other municipal issues.

**A.C. ALLYN AND COMPANY**

71 W. Monroe St., Chicago, Ill.

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**REAL ESTATE MORTGAGE BONDS**

We are interested in the purchase of first mortgage bond issues covering business property, hotels, apartment houses, etc., in amounts of \$50,000 and upwards. Entire issues city, county and district bonds purchased.

**MARX AND CO.**

Brown-Marx Bldg.

Birmingham, Alabama

**We Buy Bonds**

City, County, School and Road, from Municipalities and Contractors

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THE PROVIDENT SAVINGS BANK & TRUST CO.  
CINCINNATI OHIO

**Sold but not delivered**

**Y**OU sell a bill of goods. You ship them. But the transaction is not completed until the shipment is *delivered*.

The wise shipper always covers his shipment with a Transportation Insurance Policy.

Such a policy insures your goods against the risks and perils of transportation not only when in the hands of the railroad but upon trucks, docks, ferries and public platforms . . . from the moment of loading at shipping point to actual delivery.

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**Insurance Company of North America**

Third and Walnut Streets  
Philadelphia

"The Oldest American Fire and Marine Insurance Company"  
Founded 1792





*All of these Bonds having been subscribed for, this advertisement appears only as a matter of record.*

# \$ 150,000,000

## Imperial Japanese Government External Loan of 1924

### Thirty-Year Sinking Fund 6½% Gold Bonds

Dated February 1, 1924

Interest payable February 1 and August 1

Due February 1, 1954

#### Non-Redeemable for Fifteen Years

*Principal and interest payable in New York City at the office of the Yokohama Specie Bank, Ltd., in United States gold coin of the present standard of weight and fineness, without deduction for any Japanese taxes, present or future.*

*Coupon Bonds in denominations of \$1,000, \$500 and \$100*

*Redeemable as a whole or in part, at par and accrued interest, at the option of the Government, upon 90 days' notice on or after February 1, 1939.*

*Monthly Sinking Fund payments at the following annual rates, commencing August 1, 1924, and continuing while any of the Dollar Bonds are outstanding, will be used to purchase such Bonds in the market at not exceeding 100% and accrued interest:*

From August 1, 1924 to July 1, 1929, inclusive.....	\$5,000,000 per annum
From August 1, 1929 to July 1, 1934, inclusive.....	\$4,000,000 per annum
From August 1, 1934 to maturity.....	\$3,000,000 per annum

*The following statement concerning the Bonds has been prepared for us by Mr. Kengo Mori, Special Finance Delegate of the Imperial Japanese Government:*

**AUTHORIZED ISSUE** The Imperial Japanese Government External Loan of 1924 is to be an International Loan to be issued in the United States of America, England and Holland, as follows:

United States and Holland.....	\$150,000,000
England.....	£25,000,000

The Bonds of this Loan are to be direct external obligations of the Imperial Japanese Government. Bonds of the American and Dutch issue are to be payable in United States gold coin or, at the option of the holder, in London in Sterling at an exchange rate of \$4.8665 to the pound Sterling. Bonds of the English issue are to be payable in Sterling only. The issue in Holland will be made by Messrs. Hope and Co. and their associates, at the same price as in New York. The issue in England will be of Thirty-Five Year 6% Bonds to be offered at 87½% and interest, yielding about 6.96%, by the Westminster Bank, Ltd., Hong Kong & Shanghai Banking Corporation, Yokohama Specie Bank, Ltd., Messrs. Baring Bros. & Co., Ltd., Messrs. Morgan Grenfell & Co., Messrs. N. M. Rothschild & Sons and Messrs. J. Henry Schröder & Co.

**SPECIAL PROVISIONS** The Japanese Government covenants that if, while any of the Bonds of this Loan are outstanding, it shall secure any loan by a lien or charge upon any of its specific revenues or assets, it will secure the Bonds of this Loan equally and ratably with any obligations secured by such lien or charge.

**SINKING FUND** The Japanese Government covenants that, commencing August 1, 1924, and continuing while any of the Dollar Bonds are outstanding, it will deposit in New York with the Yokohama Specie Bank, Ltd., its fiscal agents, in equal monthly instalments, the following sums to be used as a Sinking Fund to purchase such Dollar Bonds in the market at not exceeding 100% and accrued interest, viz.:

For each of the five years from August 1, 1924 to July 31, 1929.....	\$5,000,000;
For each of the five years from August 1, 1929 to July 31, 1934.....	\$4,000,000;
And annually from August 1, 1934 to maturity.....	\$3,000,000.

If in any month Bonds are not obtainable at or under 100% and accrued interest, the unused portion of the monthly Sinking Fund payment at the end of the month will revert to the Japanese Government. A separate Sinking Fund will apply to the English issue.

**PURPOSE OF ISSUE** The proceeds of this Loan are to be used, in part, to retire the outstanding balance of the Imperial Japanese Government 4½% Sterling Loan, First and Second Series, due February 15, 1925, and July 10, 1925, respectively, and, in part, to purchase materials and supplies for

**WE OFFER THE ABOVE BONDS FOR SUBSCRIPTION, SUBJECT TO ALLOTMENT, AT 92½% AND ACCRUED INTEREST, TO YIELD 7.10% TO MATURITY.**

*All subscriptions will be received subject to the issue and delivery to us of the Bonds as planned, and to the approval by our counsel of their form and validity.*

*Subscription books will be opened at the office of J. P. Morgan & Co., at 10 o'clock A. M., Friday, February 15, 1924. The right is reserved to reject any and all applications, and also, in any case, to award a smaller amount than applied for.*

*The amounts due on allotments will be payable at the office of J. P. Morgan & Co., in New York funds to their order, on or about March 3, 1924, as called for, against the delivery of Interim Receipts or temporary Bonds, pending the preparation of definitive Bonds.*

*Payment for Bonds allotted may be made in the bonds of the Imperial Japanese Government 4½% Sterling Loan of 1905, First and Second Series, due, respectively, February 15, 1925, and July 10, 1925, with unmatured coupons attached, which will be accepted at prices equivalent to a 4¾% interest yield basis computed from the date of payment of subscriptions to October 1, 1924, the date as of which the 4½% bonds are to be called for redemption as above stated.*

*The par value of all Japanese Government bonds quoted on the New York Stock Exchange is \$97½ per £200 bond.*

*Circulars describing the Loan in greater detail may be obtained from any of the undersigned upon request.*

**J. P. MORGAN & CO.**  
BANKERS TRUST COMPANY, New York  
**LEE, HIGGINSON & CO.**  
**ROBERT GARRETT & SONS**

**KUHN, LOEB & CO.**  
**DILLON, READ & CO.**

**THE NATIONAL CITY COMPANY**  
GUARANTY COMPANY of New York  
**KIDDER, PEABODY & CO.**  
**HAMBLETON & CO.**

**FIRST NATIONAL BANK, New York**  
**HARRIS, FORBES & CO.**  
**ALEX. BROWN & SONS**  
**BAKER, WATTS & CO.**

New York, February 14, 1924.

the reconstruction necessitated by the earthquake and fire of September, 1923.

Of the above-mentioned 4½% Sterling Loan originally issued in the aggregate amount of £60,000,000, about £25,000,000, or 40%, has already been retired by the Japanese Government through purchases in the market, leaving outstanding such bonds of a par value equivalent, at the fixed rate of exchange named in the bonds, to approximately \$170,500,000. The Japanese Government is to call these outstanding bonds for redemption on October 1, 1924, at par (\$97½ per £200 bond) together with accrued interest to that date, in accordance with its right of redemption expressed in the bonds.

The Government's reconstruction program calls for an estimated expenditure by the Government of about \$700,000,000, of which it is expected that about \$300,000,000 will be spent in purchases outside of Japan. This latter sum is to be made available from the proceeds of this Loan and from existing funds now at the disposal of the Japanese Government in New York and in London. It is the intention of the Government that the remainder of the funds for reconstruction purposes shall be raised in Japan.

This Loan, together with the existing foreign balances mentioned, will, therefore, provide not only for the retirement of substantially the whole of the Japanese Government's external debt maturing prior to 1931, but also for the Japanese Government's entire estimated financial requirements in foreign markets for reconstruction work.

**REVENUES AND EXPENDITURES** In every year since 1881-1882, the ordinary revenues of the Japanese Government have exceeded its ordinary expenditures. Although extraordinary revenues (exclusive of proceeds of loan issues) have not always fully covered extraordinary expenditures, the Government's indebtedness has arisen, not from a series of recurring budget deficits, but, apart from the expenses of the Russo-Japanese War, principally from the purchase and improvement of economic undertakings, such as the railway, telegraph and telephone systems and the development of new territory.

**PREVIOUS ISSUES** This Loan is the first direct external issue made by the Imperial Japanese Government in the American market since 1905, the year of the Russo-Japanese War. In March and in July of that year, part of the 4½% Sterling Loan, above referred to, was offered to yield about 5.32%, and, in November, part of an international 4% Loan, maturing in 1931, was offered to yield approximately 4.67%. These offerings in the United States aggregated about \$137,500,000 par value of bonds.



### Fertilizers and Fertilizer Materials Nearly One-Third of Total Chemical Imports in 1923.

The total value of imports of chemicals and allied products in 1923 into the United States had an aggregate value of \$210,609,185, and of exports, \$146,147,420, according to compilation of the Chemical Division of the Department of Commerce.

Total imports of coal-tar chemicals advanced from a value of \$11,012,769 in 1922 to \$17,273,682 in 1923. Of this amount, in 1923, two-thirds was made up of crude materials and 30 per cent of finished coal-tar products. Dead or creosote oil was the most important commodity received when 64,199,636 gallons worth \$10,071,393 arrived in 1923, an increase of 54 per cent in quantity and 137 per cent in value. Naphthalene to the value of \$578,563 (21,036,458 pounds) came in 1923. Receipts of alizarin and derivatives fell from \$701,934 (479,859 pounds) in 1922, to \$403,612 (290,130 pounds) in 1923. Indications are that there was no radical change made in amounts of colors, dyes and stains, color acids, and color bases, entering the United States in 1923, compared with 1922. In 1923, receipts were valued at \$4,424,311 (3,252,383 pounds), of which amount 44 per cent came from Germany, and 30 per cent from Switzerland.

Fertilizers and fertilizer materials which accounted for 30 per cent of our total chemical imports advanced 39 per cent in quantity and 41 per cent in value from 1,340,440 tons, valued at \$45,122,574 in 1922 to 1,857,866 tons, \$63,881,361 in 1923. Advances were made in all the individual items embraced under this head except in crude potassium chloride, and kainite. Purchases of sodium nitrate which comprised nearly two-thirds of the total fertilizers rose 60 per cent in value from \$26,152,723 (542,464 tons) to \$41,955,770 (891,679 tons).

### Sees Good Business Ahead This Year.

John T. Cochrane, President of the Alabama, Tennessee & Northern Railroad Co., having just completed a trip over the line, is quoted in a report from Mobile as saying: "With weather conditions improved lumber mills are now running full time and shippers all tell me they have orders for many weeks ahead; as a whole lumbermen are anticipating good business this year. In the farming regions the price of cotton has been so satisfactory that both farmers and merchants are in better condition than for some time. I believe that this year can be counted upon for good, steady business and that prosperity will be general notwithstanding the presidential election on hand."

### Officers for United Engineering Society.

William L. Saunders, chairman of the Naval Consulting Board and deputy chairman of the Federal Reserve Bank of New York, has been elected president of the United Engineering Society, whose offices are at 29 W. 39 street, New York. Mr. Saunders is also chairman of the board of the Ingersoll-Rand Co. of New York, and a director of other corporations.

Other officers of the United Engineering Society include George H. Pegram, first vice-president; J. V. W. Reynders, second vice-president; Alfred D. Flinn, secretary; Joseph Struthers, treasurer, and Henry A. Lardner, assistant treasurer.

### To Vote on \$350,000 Bond Issue.

Colorado, Tex.—An election has been called by the commissioners court of Mitchell County for March 22, on a \$325,000 bond issue to supplement state and federal aid funds of \$650,000 for roads. A concrete road over the route of the Bankhead highway will be constructed across the county from east to west.

### Banana Culture in Florida on Commercial Scale Rapidly Expanding.

Banana growing in Florida is a new food-fruit industry of wonderful possibilities, according to W. E. Bolles, secretary of the Florida Banana Growers Association, of Oldsmar, who writes: "It is a comparatively new thing in a commercial way but the acreage is increasing rapidly this spring. When I first came to Florida I saw a few bananas growing here and there and bearing good bunches of fruit. They have been grown here in a small way for about 300 years. I concluded that where 10 could be grown successfully 100 and 1000 could be grown. After experimenting with a number of varieties we decided that the Musa Cavendishii and the Musa Champa, locally known as the Hart and Ladyfinger, are the best for Florida in general, although the Orinoco or so-called Horse banana bears fruit in Georgia and is grown outdoors for ornamental purposes as far north as South Carolina."

In October 1921 the Florida Banana Growers Association was organized in Tampa, and the membership has steadily mounted. The association has for its object the growing of a large portion of the bananas consumed in this country.

At the last annual meeting of the association 200 growers attended. The mid-winter meeting will be held in Kissimmee this week.

The progress made in banana growing has attracted much attention, and many inquiries have been received from Georgia, Louisiana, Texas and California. There are now about 5000 acres under cultivation. On Mr. Bolles' plantation about a dozen varieties are being grown successfully.

### Two Iron and Steel Plants Consolidate—Larger Production Planned.

Wheeling, W. Va.—Stockholders of the J. E. Moss Iron Works and the Riverside Bridge Co., the former of Wheeling, and the latter at Martin's Ferry, Ohio, have ratified action of the directors of these two companies for the acquisition of the latter company by the former. By this transaction the J. E. Moss Iron Works becomes one of the largest producers of fabricated steel in the country. It is understood that important changes will be made at the Riverside plant which will enable it to produce a greater tonnage.

The Riverside Bridge Co., established in 1902, has fabricated material for a large number of important buildings, bridges, etc. The J. E. Moss Iron Works was founded in 1909. In addition to the fabrication of structural steel, it also manufactures and installs miscellaneous and ornamental iron and bronze work.

The company will enlarge its office building here for the accommodation of from 50 to 60 employees. More than 500 skilled workmen will be employed at the plants. J. E. Moss will remain as president; R. R. Kitchen, vice president, and F. G. Jolliffe, secretary. J. H. Lerch, who was vice president and general manager of the Riverside Bridge Co., will become general manager of the J. E. Moss Iron Works, and J. G. Stromp, assistant manager, will remain in that position and will also have charge of sales.

### Contract Let for \$850,000 Building in Oklahoma City.

Oklahoma City, Okla.—General contract has been awarded by the Physicians and Dentists' Building Co. to Reinhart & Donovan of this city, for the erection of its proposed building here to cost \$850,000. The structure will be 140 by 75 feet, 12 stories, of reinforced concrete and Bedford stone, with metal ceilings, concrete floors, vaults, mail chutes and Otis elevators. Layton, Smith & Forsyth of Oklahoma City, are the architects. Contract for heating and plumbing has been awarded to Crook & McDonnell of Oklahoma City.

### Addition to Paducah Power Plant Completed.

Work has been completed on the enlargement of the power plant of the Paducah (Ky) Electric Company, and preliminary running tests have been made of the new generating equipment. The extension increases the capacity of the new station by 2500 kilowatts. The addition to the present power house consists of a new steel frame building with floors and roof of concrete and walls of brick, and includes a turbine room about 23x45 feet and 53 feet high, and boiler room about 25x60 feet and 66 feet high, exclusive of the 13-foot monitor over the coal bunker. The turbine room is equipped with a 20-ton electric crane.

New coal handling equipment has been installed consisting of a stiff-legged derrick with clamshell bucket for storing and reclaiming coal from the yard, a track hopper, apron feeder, crusher, inclined belt conveyor and bucket elevator delivering to the overhead continual Berquist concrete-lined bunker in the boiler room. The feeder and crusher have been located in an underground concrete housing and the belt conveyor will have a concrete housing, partly underground and partly above ground. A one-ton Jeffery electric driven traveling weigh lorry will deliver coal from the bunker to the stoker hopper, and also through a spout to cars running in the aisle of the present boiler room to the present hand-fired boilers.

The new boiler equipment consists of a 612 horse power Stirling water tube boiler equipped with Illinois traveling chain grate stoker, Foster connective type superheater, Vulcan soot blowers and American Arch Company's stoker arch. An Ingersoll-Rand barometric type steel plate condenser with steam operated jets for air removal and a hot well for discharge water will be located in the boiler room. The new boiler will be equipped with a lined cast iron plate ash-hopper, discharging through gates operated by steam power into the ash cars in the basement. These cars will carry the ashes to the yard from which they will be removed by motor trucks.

Forty new spray nozzles with necessary piping will be added to the spray pond, giving a total spraying capacity of 4800 gallons of water per minute.

The new electric generating equipment consists of a 2500 kilowatt Westinghouse Electric and Manufacturing Company's turbo-generator. Additional exciter capacity has also been installed consisting of a 50 kilowatt General Electric exciter, driven by a Terry steam turbine and arranged for further addition of a motor drive.

The design and construction of the new station was done for the Paducah Electric Company by Stone & Webster, Inc. of Boston, Mass.

### 75,000 Acre Drainage Project in Florida Nearing Completion—To Cost \$1,500,000.

Fort Pierce, Fla.—In course of construction for the past three years, the North St. Lucie river drainage project is expected to be completed by August 1. This enterprise will afford drainage for 75,000 acres of land and will cost about \$1,500,000. Approximately 5,800,000 cubic yards have been excavated, leaving less than 1,000,000 cubic yards to be done. The only remaining work is the excavation of about nine miles of ditches in the northwest part of the district, and clearing and straightening Ten Mile Creek, which is to serve as the main outlet canal.

### New Steamer for New York-New Orleans Route.

The Southern Pacific Company, according to a recent announcement in New York, has let a contract to the Todd Drydock & Construction Corporation of Tacoma, Wash., to build a new turbine steamship which will be put on the

route between New York and New Orleans. Although the vessel will not be much larger than some other vessels in the company's service its design is such that there will be increase of about 25 per cent in cargo capacity. The passenger cabins are also of improved arrangement and design. This steamer will be 445 feet long over all and 57 feet wide with a deadweight capacity of 7000 tons. The propellers will be driven by DeLaval compound turbines with double reduction gear and the boilers will be six Babcock & Wilcox water tube boilers equipped to burn fuel oil. The ship is to be built with a view to comfort, capacity and economy of operation.

### Wealth of Missouri \$9,981,409,000, an Increase of 77 Per Cent in Ten Years.

The value of the wealth of Missouri, December 31, 1922, as reported by the Department of Commerce in a preliminary estimate, was \$9,981,409,000, as compared with \$5,634,808,000 in 1912, an increase of 77.1 per cent. Per capita values increased from \$1690 to \$2903, or 71.8 per cent.

All classes of property increased in value from 1912 to 1922, except live stock, which decreased from \$308,101,000 to \$248,056,000, or 19.5 per cent. The estimated value of taxed real property and improvements increased from \$2,968,535,000 to \$5,426,340,000, or 82.8 per cent; exempt real property from \$295,524,000 to \$369,966,000, or 25.2 per cent; farm implements and machinery from \$55,328,000 to \$98,586,000, or 78.2 per cent; manufacturing machinery, tools, and implements from \$125,038,000 to \$333,027,000, or 166.3 per cent; and railroads and their equipment from \$499,477,000 to \$612,795,000, or 22.7 per cent. Privately owned transportation and transmission enterprises, other than railroads, increased in value from \$267,557,000 to \$404,419,000, or 51.2 per cent; and stocks of goods, vehicles other than motor, furniture, and clothing from \$1,115,248,000 to \$2,342,431,000, or 110 per cent. The value of motor vehicles in 1922 was \$145,789,000.

### Shipments of Zinc Spelter for Export.

Henryetta, Okla., February 16—[Special.]—The Eagle-Picher Lead Co. has made its third trainload shipment of zinc spelter for export within the past few weeks. The first two trains of twenty cars each, left in January, and the third train of twenty-six cars on February 2. The shutting down of the United States zinc smelter, recently caused some apprehension, but it is now stated that this plant will shortly resume work. There has also been some cleaning up of the old Henryetta smelter, and it is rumored that the plant will reopen this spring, and that superintendent O. A. Oesterlee, is promoting a rolling mill in connection with the reorganized smelter.

### \$1,000,000 Development of 575 Acres.

Fulford, Fla.—The development of Fulford-By-The-Sea embracing 575 acres, has been started by the Florida Cities Finance Co., of which M. C. Tebbetts is president and manager. Plans for the development include the construction of streets and roads, curbs, cement walks, municipal buildings, gravity system of waterworks with concrete tank, erection of a convention hall to seat 3000, and a two-story fraternal building.

The company has an authorized capital stock of \$1,000,000 with \$165,000 paid in. C. E. Merritt of Fulford is the engineer in charge of the work.

Mayor R. W. Pipkin of Morganton, N. C., advises the MANUFACTURERS RECORD that the recent election on \$150,000 of street improvement bonds in Morganton carried by a vote of 586 to 45.



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FEBRUARY 28, 1924

### From Florida's New York Exposition the South Should Learn Many Lessons for Southern Exposition Next Year.

The exposition which Florida has just given in New York, though possibly somewhat inadequate to the real resources of the South, is merely a hint of the possibilities of the proposed Southern Exposition in New York next January to represent the resources and achievements of the entire South.

Multiply what Florida has done as one state by the sixteen Southern states, multiply this exposition by the awakened spirit of the whole South and by the time in which to get ready as compared with the brief time allotted to Florida, and we can gain some conception of what the Southern Exposition in New York next January should mean to the entire South.

Every state, every industry, every section of every state should be represented. The products of the South's iron and steel industry should be there, its chemical interests should be represented, its cotton mills should display their varied products and there should be models and moving pictures of the homes and villages of their operatives in order to exhibit to the people of the East what the South has achieved for the welfare of its employees.

The agricultural products of the South, preeminently its diversified products, its grains, its grasses, its fruits, its vegetables, should be displayed in the best manner and on the largest scale possible. Southern woods in the raw state and in the finished product of every variety of furniture should be in evidence. Southern minerals, the rare ones and the common, the ores, and the coals, should be given such a display as never before. Indeed here should be embodied to the fullest extent every variety of Southern resources and of Southern products and of Southern life.

No time is to be lost in getting ready. Before the doors of the exposition open every detail to the final point should have been completed and New York and all the East should thus be given an opportunity to see not only the South's resources and achievements in material things on display, but equally important the South should prove its ability to do these things, to do them energetically and broadly and do them on time. The exhibit of Southern energy in this respect can perhaps be made to have as much influence upon the sentiment of Eastern people as the exhibits of material things upon which they will gaze.

Let the South get to work at once and get ready and make this exposition worthy of its unequalled resources and of its remarkable achievements.